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STRUCTURE FILE UPDATES: 27 JAN 2010 HIGHEST RN 1203797-79-8 DICTIONARY FILE UPDATES: 27 JAN 2010 HIGHEST RN 1203797-79-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> d que

L1 1 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON US20080097074/PN L2 10 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (135796-12-2/BI

OR 25038-75-9/BI OR 26023-30-3/BI OR 26161-42-2/BI OR 26811-96-1/BI OR 26917-25-9/BI OR 33135-50-1/BI OR 65792-44-1/BI OR 840501-68-0/BI OR 840501-69-1/BI)

L3 STF

NODE ATTRIBUTES:
CONNECT IS E1 RC AT 11
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC I

KSPEC I

NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L5 25716 SEA FILE=REGISTRY SSS FUL L3

L6 1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L5 AND L2

L13 STR

NODE ATTRIBUTES:

CONNECT IS E2 RC AT 7
CONNECT IS E2 RC AT 11
DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

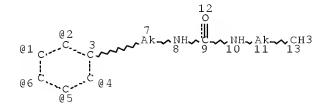
GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

| L15 | 2644 | SEA FILE=REGISTRY SUB=L5 SSS FUL L13 |
|------|------|--|
| L17 | 811 | SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L15 AND 1/NR |
| L18 | 620 | SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L17 NOT (METHOXYP |
| | | HEN? OR HYDROXYPHEN? OR BENZOIC ACID?) |
| L19 | 591 | SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L18 NOT S/ELS |
| L20 | 374 | SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L19 NOT X/ELS |
| L21 | 242 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L20 |
| L22 | 1 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L21 AND L1 |
| L23 | 0 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L21 AND STEREOCOMP |
| | | LEX COMPOUND? |
| L24 | 1 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L21 AND STEREOCOMP |
| | | LEX COMPOSITION? |
| L25 | 1 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L21 AND STEREOCOMP |
| | | LEX? |
| L26 | 15 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L21 AND CRYSTAL? |
| L27 | 18 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L6 |
| 1.36 | | STR |



VPA 14-1/2/4/5/6 U NODE ATTRIBUTES:

CONNECT IS E2 RC AT 7 CONNECT IS E2 RC AT 11

CONNECT IS E2 RC AT 11
CONNECT IS E2 RC AT 14

CONNECT IS E2 RC AT 19

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 20

| STEREO ATTRIBUTE | ES: NONE |
|------------------|--|
| L38 50 | SEA FILE=REGISTRY SUB=L15 SSS FUL L36 |
| L39 28 | SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L38 AND 1/NR |
| L40 39 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L39 |
| L41 29 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L40 AND (1840-2004)/PRY,AY,PY |
| L42 14 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L27 AND (1840-2004)/PRY,AY,PY |
| L43 15 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON (L22 OR L23 OR L24 OR L25 OR L26) |
| L44 9 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L43 AND (1840-2004)/PRY,AY,PY |
| L45 35 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L41 OR L42 OR L44 |
| L46 12 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L45 AND (MOLD? OR MOULD?) |
| L47 9 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L45 AND CRYSTAL? |
| L48 16 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L45 AND (PLASTIC? OR POLYMER?)/SC,SX |
| L49 35 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON (L45 OR L46 OR L47 OR L48) |
| L50 17894 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON "BIODEGRADABLE MATERIALS"+PFT,NT/CT |
| L51 2 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L49 AND L50 |
| L52 2 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L49 AND BIODEGRAD ABL? |
| L53 35 | SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L49 OR (L51 OR L52) |

=> fil hcap

FILE 'HCAPLUS' ENTERED AT 13:31:23 ON 29 JAN 2010
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FILE COVERS 1907 - 29 Jan 2010 VOL 152 ISS 6

FILE LAST UPDATED: 28 Jan 2010 (20100128/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2009

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 153 1-35 ibib ed abs hitstr hitind

L53 ANSWER 1 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2006:608712 HCAPLUS Full-text

DOCUMENT NUMBER: 145:84148

TITLE: Biodegradable resin compositions for

molded articles with good impact and heat

resistance, tensile properties, transparency, and

processability

INVENTOR(S): Hashimoto, Yoshihiko; Aoyama, Taizo; Nakamura,

Nobuo; Suzuki, Noriyuki

PATENT ASSIGNEE(S): Kaneka Corporation, Japan SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA | TENT : | NO. | | | KIN | D | DATE | | | APPL | ICAT | ION | NO. | | D | ATE | |
|---------------|-----------------------|---|---|---|---|---|---|---|---|---|--|---|--|--|---|--|---|
| WO | 2006 | 0648 | 46 | | A1 | _ | 2006 | 0622 | , | WO 2 | 005- | JP22 | 960 | | 2 | 005121 | 4 |
| | | CH, GB, KN, MK, RO, TZ, AT, IE, BF, | CN, GD, KP, MN, RU, UA, BE, IS, BJ, | CO, GE, KR, MW, SC, UG, BG, IT, CF, | CR, GH, KZ, MX, SD, US, CH, LT, CG, | CU, GM, LC, MZ, SE, UZ, CY, LU, CI, | AU, CZ, HR, LK, NA, SG, VC, CZ, LV, CM, LS, | DE, HU, LR, NG, SK, VN, DE, MC, GA, | DK, ID, LS, NI, SL, YU, DK, NL, GN, | DM, IL, LT, NO, SM, ZA, EE, PL, GQ, | BG, DZ, IN, LU, NZ, SY, ZM, ES, PT, GW, | BR, EC, IS, LV, OM, TJ, ZW FI, RO, ML, | EE, JP, LY, PG, TM, FR, SE, MR, | EG, KE, MA, PH, TN, GB, SI, NE, | ES, KG, MD, PL, TR, GR, SK, | FI, KM, MG, PT, TT, HU, TR, TD, | |
| ΕP | 1826 | ZW, | | AZ, | • | KG, | KZ, 2007 | MD, | RU, | ТJ, | TM 005- | 8164 | | ŕ | | 005121 | 4 |
| CN | R: 1010 | IE, | IS, | IT, | | LT, | CZ, LU, 2007 | LV, | MC, | NL, | ES, PL, | PT, | RO, | SE, | SI, | HU, SK, TI | |
| US PRIORIT | 2008 Y A PP | | | | A1 | | 2008 | 0207 | | | 007- 004- | | | | _ | 007071: 004121 | _ |
| | | | | | | | | | | JP 2 | 004- | | 88 | | A 2 | 004121 | 5 |
| | | | | | | | | | | | :005– | | | | A 2 | 005042 | 6 |
| | | | | | | | | | | | :005– | | | | | 005042 | |
| | | | | | | | | | , | WO 2 | :005– | JP22 | 960 | | W 2 | 005121 | 4 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 145:84148

- ED Entered STN: 23 Jun 2006
- AΒ A biodegradable polymer derived from a plant which has pos. immobilized global carbon dioxide is used. The resin compns. comprise (A) a biodegradable aliphatic polyester polymer and (B) ≥1 copolymer selected from a composite rubber graft copolymer and a core-shell graft copolymer. Alternatively the resin compns. comprise (A) a blodegradable aliphatic polyester polymer and (B) ≥1 compound selected from a sorbitol compound having a specific structure and a substituted urea compound having a urea bond. Thus, tetraethoxysilane 1, γ methacryloyloxypropyldimethoxymethylsilane 1.5, and octamethylcyclotetrasiloxane 97.5 parts were condensated, 10 parts of the resulting rubber latex was mixed with 65 parts Bu acrylate and 0.65 parts allyl methacrylate and polymerized to give a composite rubber, 75 parts of which was graft-polymerized with 20 parts Me methacrylate and 5 parts Bu acrylate, 17 parts of the resulting graft copolymer was formulated with 93 parts a 3-hydroxybutyrate-3-hydroxyhexanoate copolymer and 22 parts talc and injection-molded to give a test piece with Izod impact strength 145 J/m and heat distortion temperature 100°.
- IT 65792-44-1, Hackreen SX
 - (crystal nucleating agent; biodegradable resin compns. for molded articles with good impact and heat resistance, tensile properties, transparency, and processability)
- RN 65792-44-1 HCAPLUS
- CN Urea, N-octadecyl-N'-[[4-
 - [[[(octadecylamino)carbonyl]amino]methyl]phenyl]methyl]- (CA INDEX NAME)

- CC 37-6 (Plastics Manufacture and Processing) Section cross-reference(s): 38, 39
- ST biodegradable resin compn molded article impact heat resistance; tensile property transparency processability; graft acrylic polysiloxane silicate hydroxybutanoic hydroxyhexanoic acid copolymer blend
- IT Silicone rubber, properties
 (Kaneka Silyl M 400, blend with polyesters; biodegradable resin compns. for molded articles with good impact and

heat resistance, tensile properties, transparency, and processability)

- IT Silicone rubber, uses
 - (acrylic, graft, blend with polyesters; biodegradable resin compns. for molded articles with good impact and heat resistance, tensile properties, transparency, and processability)
- IT Polysiloxanes, preparation

(acrylic-silicate-, graft, blend with polyesters; biodegradable resin compns. for molded articles with good impact and heat resistance, tensile properties, transparency, and processability)

IT Silicone rubber, preparation (acrylic-silicate-, graft, intermediate; biodegradable

resin compns. for molded articles with good impact and heat resistance, tensile properties, transparency, and processability)

IT Synthetic rubber, preparation

(acrylic-silicate-siloxane, graft, intermediate; biodegradable resin compns. for molded articles with good impact and heat resistance, tensile properties, transparency, and processability)

IT Polyesters, uses

(aliphatic, blend with graft copolymers; biodegradable resin compns. for molded articles with good impact and heat resistance, tensile properties, transparency, and processability)

IT Amides, uses

(aliphatic, crystal nucleating agents; biodegradable resin compns. for molded articles with good impact and heat resistance, tensile properties, transparency, and processability)

IT Acrylic rubber

(allyl methacrylate-Bu acrylate, intermediate; biodegradable resin compns. for molded articles with good impact and heat resistance, tensile properties, transparency, and processability)

IT Acrylic rubber

Silicone rubber, preparation

(allyl methacrylate-Bu acrylate-γmethacryloyloxypropyldimethoxymethylsilaneoctamethylcyclotetrasiloxane-tetraethoxysilane, graft,
intermediate; biodegradable resin compns. for
molded articles with good impact and heat resistance,
tensile properties, transparency, and processability)

IT Aeromonas caviae

Cupriavidus necator

(biodegradable material source; biodegradable resin compns. for molded articles with good impact and heat resistance, tensile properties, transparency, and processability)

IT Crystal nucleating agents

Plastic films

(biodegradable resin compns. for molded articles with good impact and heat resistance, tensile properties, transparency, and processability)

IT Molded plastics, properties

(biodegradable resin compns. for molded articles with good impact and heat resistance, tensile properties, transparency, and processability)

IT Biodegradable materials

(blend with graft copolymers; biodegradable resin compns. for molded articles with good impact and heat resistance, tensile properties, transparency, and processability)

IT Polyesters, properties

(blend with graft copolymers; biodegradable resin compns. for molded articles with good impact and heat resistance, tensile properties, transparency, and processability)

IT Rubber, uses

(blend with polyesters; biodegradable resin compns. for molded articles with good impact and heat resistance, tensile properties, transparency, and processability)

IT Ureas

(crystal nucleating agents; biodegradable resin compns. for molded articles with good impact and heat

```
resistance, tensile properties, transparency, and processability)
ΙT
    Acrylic rubber
        (graft, blend with polyesters; biodegradable resin
        compns. for molded articles with good impact and heat
        resistance, tensile properties, transparency, and processability)
ΙT
     Impact-resistant materials
        (heat-resistant; biodegradable resin compns. for
        molded articles with good impact and heat resistance,
        tensile properties, transparency, and processability)
ΙT
     Heat-resistant materials
     Transparent materials
        (impact-resistant; biodegradable resin compns. for
        molded articles with good impact and heat resistance,
        tensile properties, transparency, and processability)
ΤT
     Silicone rubber, preparation
        (methacryloyloxypropyldimethoxymethylsilane-
        octamethylcyclotetrasiloxane-tetraethoxysilane, intermediate;
        biodegradable resin compns. for molded articles
        with good impact and heat resistance, tensile properties,
        transparency, and processability)
ΙT
     Polymer blends
        (polyester-graft copolymer blends; biodagradabla resin
        compns. for molded articles with good impact and heat
        resistance, tensile properties, transparency, and processability)
ΤT
     Acrylic rubber
        (silicate-siloxane-, graft, intermediate; blodegradable
        resin compns. for molded articles with good impact and
        heat resistance, tensile properties, transparency, and
        processability)
ΙT
    Acrylic rubber
        (siloxane-, graft, blend with polyesters; biodegradable
        resin compns. for molded articles with good impact and
        heat resistance, tensile properties, transparency, and
        processability)
ΙT
     Impact-resistant materials
        (transparent; biodegradable resin compns. for
        molded articles with good impact and heat resistance,
        tensile properties, transparency, and processability)
     43136-14-7, Hackreen SM
ΤT
        (Hackreen SM, crystal nucleating agent;
        biodegradable resin compns. for molded articles
        with good impact and heat resistance, tensile properties,
        transparency, and processability)
ΙT
     508233-68-9P
        (biodegradable resin compns. for molded
        articles with good impact and heat resistance, tensile properties,
        transparency, and processability)
ΙT
     129669-62-1P, Allyl methacrylate-butyl
     acrylate-\gamma-methacryloyloxypropyldimethoxymethylsilane-methyl
     methacrylate-octamethylcyclotetrasiloxane-tetraethoxysilane graft
     copolymer
                 891501-16-9P
        (blend with biodegradable polymer; biodegradable
        resin compns. for molded articles with good impact and
        heat resistance, tensile properties, transparency, and
        processability)
ΙT
     147398-31-0P, 3-Hydroxybutanoic acid-3-hydroxyhexanoic acid copolymer
        (blend with graft copolymer; biodegradable resin compns.
        for molded articles with good impact and heat resistance,
        tensile properties, transparency, and processability)
                                                        65792-44-1
     19046-64-1, Gel All-D 22214-23-9, Hackreen SH
ΙT
```

, Hackreen SX 80124-42-1, NC 4 81541-12-0, Gel All-MD

(crystal nucleating agent; biodegradable resin

compns. for molded articles with good impact and heat

resistance, tensile properties, transparency, and processability)

56361-96-7, Bis(p-chlorobenzylidene)sorbitol 28805-02-9 ΤТ

91835-70-0, Xylylene bisstearylurea

(crystal nucleating agents; biodegradable resin

compns. for molded articles with good impact and heat

resistance, tensile properties, transparency, and processability)

30231-49-3P, Butyl acrylate-butyl methacrylate-methacrylic acid ΙT copolymer

> (modifier for rubber particle aggregation; biodegradable resin compns. for malded articles with good impact and heat resistance, tensile properties, transparency, and processability)

61488-62-8P, Allyl methacrylate-butyl acrylate copolymer 142280-86-2P, y-Methacryloyloxypropyldimethoxymethylsilaneoctamethylcyclotetrasiloxane-tetraethoxysilane copolymer 172502-14-6P

> (rubber, intermediate; biodegradable resin compns. for molded articles with good impact and heat resistance, tensile properties, transparency, and processability)

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS OS.CITING REF COUNT: 1

RECORD (1 CITINGS)

REFERENCE COUNT: THERE ARE 8 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE

<--

RE FORMAT

L53 ANSWER 2 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2006:293122 HCAPLUS Full-text

DOCUMENT NUMBER: 144:340833

TITLE: Transparent thermal recording material containing

carbamoylaminosalicylic acid color developer and

urea compound

INVENTOR(S): Aihara, Hideo; Kuga, Yutaka; Okada, Shinji;

Higashimatsu, Hiroshi; Sawamura, Ichiro

PATENT ASSIGNEE(S):

Ricoh Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 16 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| | | | | |
| JP 2006082390 | A | 20060330 | JP 2004-269498 | 20040916 |
| | | | < | |
| PRIORITY APPLN. INFO.: | | | JP 2004-269498 | 20040916 |

OTHER SOURCE(S): MARPAT 144:340833

Entered STN: 30 Mar 2006

GΙ

The material has a heat-sensitive recording layer mainly containing a colorless or light-colored leuco dye, I (R1 = C6-9 straight-chain alkyl) as a color developer, a binder, and urea compound R2NHCONHR3 (R2, R3 = C4-21 straight-chain alkyl, Ph) and/or R4NHCONHR5NHCONHR4 (R4 = C4-21 straight-chain alkyl, Ph; R5 = -C6H4-, -C6H3Me-, -CH2C6H4CH2-, -C6H4CH2C6H4-). The material shows improved image d., transparency, and storage stability.

IT 65792-44-1 104241-95-4

(thermal printing material containing carbamoylamino salicylic acid color developer and urea compound)

RN 65792-44-1 HCAPLUS

CN Urea, N-octadecyl-N'-[[4-

[[[(octadecylamino)carbonyl]amino]methyl]phenyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_2\text{--}\text{NH} - \overset{\circ}{\text{C}}\text{--}\text{NH} - (\text{CH}_2)_{17}\text{--}\text{Me} \\ \text{Me} - (\text{CH}_2)_{17}\text{--}\text{NH} - \overset{\circ}{\text{C}}\text{--}\text{NH} - \text{CH}_2 \end{array}$$

RN 104241-95-4 HCAPLUS

CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 4128-43-2 65792-44-1 104241-95-4

(thermal printing material containing carbamoylamino salicylic acid color developer and urea compound)

L53 ANSWER 3 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2006:234234 HCAPLUS Full-text

DOCUMENT NUMBER: 144:302081

TITLE: Manufacture of rewritable thermal printing sheets,

thermal printing labels, thermal printing method,

and information recording memory devices comprising same thermal printing sheets Nogiwa, Toru; Kuboyama, Hiroki; Sugiyama,

INVENTOR(S): Nogiwa, Toru; Kuboyar

Nobuyoshi

PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 37 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

----JP 2006069004 A 20060316 JP 2004-254207 20040901

PRIORITY APPLN. INFO.: JP 2004-254207 20040901

<--

OTHER SOURCE(S): MARPAT 144:302081

ED Entered STN: 16 Mar 2006

The thermal printing sheet comprises a heat-sensitive layer which mainly contain polymers prepared by crosslinking of polymers bearing OH groups with linear isocyanates, and low-mol.-weight organic compds., wherein the isocyanate portion occupy 17-28 weight% of the polymers. Preferably, both (A) carboxy-free linear hydrocarbons containing urea- or urethane linkages, and (B) carboxy-free linear hydrocarbons having m.p. ≥20° lower than those of A are included in the heat-sensitive layer. In manufacture of the sheet, a protective layer is formed on the heat-sensitive layer by wet coating process, wherein the protective-layer-forming solution is heat dried at a temperature equal to or below the lowest m.p. of organic compds. included in the heatsensitive layer. The sheet employs changes between transparency and opaque arising from the degree of reflection/scattering of light at the interface between the polymer and the organic compound axystals which can be controlled heating- and cooling history. The sheet stably provides images under environment containing basic substances and environment having temperature changes.

IT 380601-06-9

(in rewritable thermal printing sheet undergoing

transparency-opaque changes in polymer-matrix organic compound layer)

RN 380601-06-9 HCAPLUS

CN Urea, N-octadecyl-N'-(phenylmethyl)- (CA INDEX NAME)

CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38, 76, 77

ST rewritable thermal printing sheet transparent opaque change; polymer matrix composite layer rewritable thermal printing sheet; org crystal polymer matrix layer rewritable thermal printing sheet; information memory device lamination thermal printing sheet

IT 504-53-0, Wax KS 14351-40-7, Suliaid S 17671-27-1, Docosyl behenate 233609-67-1 252761-87-8 380601-01-4 380601-03-6 380601-04-7 380601-05-8 380601-06-9

(in rewritable thermal printing sheet undergoing

transparency-opaque changes in polymer-matrix organic compound layer)

L53 ANSWER 4 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2005:611075 HCAPLUS Full-text

DOCUMENT NUMBER: 143:116517

TITLE: Lactic acid polymer stereocomplex

compositions and their moldings

INVENTOR(S): Ouchi, Makoto; Okamoto, Hirotaka; Nakano, Mitsuru;

Usuki, Arimitsu; Kanamori, Kenji; Okuyama, Hisashi; Yamashita, Seiji; Kageyama, Hiroshi

PATENT ASSIGNEE(S): Toyota Central Research and Development

Laboratories Inc., Japan; Toyota Motor Corp.

SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PAT | TENT | NO. | | | KIN | D | DATE | | | APPL | ICAT | ION : | NO. | | D. | ATE |
|--------|--------------|---|--|---|--|---|---|---|---|---|---|--|--|--|--|--|
| JP | 2005 | 1876 | 30 | | A | _ | 2005 | 0714 | | JP 2 | 003- | 4304 | 55 | | 2 | 0031225 |
| | 4301 2005 | | | | B2 A1 | | 2009 2005 | • | | WO 2 | 004- | JP19 | 673 | | 2 | 0041221 |
| | | CH, GB, KZ, MZ, SG, VN, BW, AM, DE, | CN, GD, LC, NA, SK, YU, GH, AZ, DK, PL, | CO, GE, LK, NI, SL, ZA, GM, BY, EE, | CR, GH, LR, NO, SY, ZM, KE, KG, ES, RO, | CU, GM, LS, NZ, TJ, ZW LS, KZ, FI, SE, | AU, CZ, HR, LT, OM, TM, MW, MD, FR, SI, NE, | DE, HU, LU, PG, TN, MZ, RU, GB, SK, | DK, ID, LV, PH, TR, NA, TJ, GR, TR, | DM, IL, MA, PL, TT, SD, TM, HU, BF, | BG, DZ, IN, MD, PT, TZ, SL, AT, IE, | EC, IS, MG, RO, UA, SZ, BE, IS, | EE, KE, MK, RU, UG, TZ, BG, IT, | EG, KG, MN, SC, US, UG, CH, LT, | ES, KP, MW, SD, UZ, ZM, CY, LU, | FI, KR, MX, SE, VC, ZW, CZ, MC, |
| CN | 1898 | | | OW, | | | | | | | | 8003 ¹ | 9034 | | 2 | 0041221 |
| | 1005 2008 | | | | C A1 | | 2009 2008 | | | US 2 | 006- | | 71 | | 2 | 0060831 |
| RIORIT | Y APP | LN. | INFO | .: | | | | | , | JP 2 | 003- | | 55 | 1 | A 2 | 0031225 |
| | | | | | | | | | , | WO 2 | 004- | | 673 | Ī | w 2 | 0041221 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 143:116517

ED Entered STN: 15 Jul 2005

The compns. comprise lactic acid polymers and aromatic urea compds. C6H6-m(R1NHCONHR2)m (R1 = C1-10 alkylene; R2 = C 1-25 alkyl; m = 1-6). Thus, a composition containing D-lactide homopolymer 0.5, PLLA 5400 [poly(L-lactic acid)] 0.5, and Hackreen SX (xylylene bisstearylurea) 0.01 g was cast into a film showing improved crystallization speed and crystallinity.

IT 65792-44-1, Hackreen SX

(crystallization accelerator; lactic acid polymer stereocomplex compns. and their moldings

RN 65792-44-1 HCAPLUS

CN Urea, N-octadecyl-N'-[[4[[[(octadecylamino)carbonyl]amino]methyl]phenyl]methyl]- (CA INDEX NAME)

```
ICM C08L067-04
IC
     ICS C08J005-00; C08K005-21
CC
     38-3 (Plastics Fabrication and Uses)
     lactic acid polymer stereocomplex molding
ST
     crystn biodegradable; crystn agent
     xylylene bisstearylurea polylactide blend
    Biodegradable materials
ΤТ
      Crystal nucleating agents
        (lactic acid polymer stereocomplex compas. and
        their moldings)
TT
    Molded plastics, uses
        (lactic acid polymer stereocomplex compas, and
        their moldings)
     Polyesters, uses
TT
     Polymer blends
        (stereocomplex; lactic acid polymer stereocomplex
        compas. and their moldings)
     26811-96-1
ΙT
        (assumed monomers, stereocomplex; lactic acid polymer
        stereocomplex compns. and their moldings
     65792-44-1, Hackreen SX
ΙT
        (crystallization accelerator; lactic acid polymer
        stereocomplex compns. and their moldings
ΙT
     26023-30-3P, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 135796-12-2P,
     D-Lactide-L-Lactide block copolymer
        (heptablock, stereocomplex; lactic acid polymer
        stereocomplex compas, and their moldings
     33135-50-1P, L-Lactide homopolymer 840501-68-0P, D-Lactide-L-Lactide
ΙT
     triblock copolymer 840501-69-1P, D-Lactide-L-Lactide pentablock
     copolymer
        (lactic acid polymer stereocomplex compas, and
        their moldings)
ΙT
     25038-75-9P, D-Lactide homopolymer
                                         26917-25-9P
        (stereocomplex; lactic acid polymer stereocomplex
        compns. and their moldings)
     26161-42-2, PLLA 5400
TΤ
        (stereocomplex; lactic acid polymer stereocomplex
        compas, and their moldings)
OS.CITING REF COUNT:
                               THERE ARE 4 CAPLUS RECORDS THAT CITE THIS
                         4
                               RECORD (6 CITINGS)
L53 ANSWER 5 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN
                         2004:1023650 HCAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         142:156240
TITLE:
                         A New Tripodal Receptor for Molecular Recognition
                         of Monosaccharides. A Paradigm for Assessing
                         Glycoside Binding Affinities and Selectivities by
                         1H NMR Spectroscopy
```

AUTHOR(S): Vacca, Alberto; Nativi, Cristina; Cacciarini,

Martina; Pergoli, Roberto; Roelens, Stefano

CORPORATE SOURCE: Dipartimento di Chimica, Dipartimento di Chimica

Organica and CNR Istituto di Chimica dei Composti Organometallici, Dipartimento di Chimica Organica, Universita di Firenze, Sesto Fiorentino, I-50019,

Italy

Т

SOURCE: Journal of the American Chemical Society (

2004), 126(50), 16456-16465 CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:156240

ED Entered STN: 30 Nov 2004

GΙ

AΒ A new tripodal receptor for the recognition of monosaccharides is described. The prototypical host features a 1,3,5-substituted 2,4,6-triethyl-benzene derivs., e.g. I (R = t-octyl, Bn, Ph), scaffold bearing three convergent Hbonding units. The binding ability of I (R = t-octyl) toward a set of octylglycosides of biol. relevant monosaccharides, including Glc, Gal, Man, and GlcNAc, was investigated by 1H NMR in CDCl3. A protocol for the correct evaluation of binding affinities was established, which can be generally applied for the recognition of monosaccharides by 1H NMR spectroscopy. A three-constant equilibrium model, including 1:1 and 2:1 host-guest association and dimerization of the receptor, was ascertained for the interaction of I (R = t-octyl) with all the investigated glycosides. An affinity index, which we defined median binding concentration BC50 in analogy to the IC50 parameter, intended to address the general issue of comparing dimensionally heterogeneous binding data, and a limiting BC500 quantity describing intrinsic binding affinities were developed for evaluating the results. BC50 values for I (R = t-octyl) range from 1 to 6 mM, indicating an intrinsic binding affinity in the millimolar range and a selectivity factor of 5 toward the investigated qlycosides. The treatment has been extended to include any generic host-quest system involved in single or multiple binding equilibrium 828931-46-0P ΙT

(new tripodal receptor for mol. recognition of monosaccharides a paradigm for assessing glycoside binding affinities and selectivities by h NMR spectroscopy)

RN 828931-46-0 HCAPLUS

CN Urea, N,N'',N'''-[(2,4,6-triethyl-1,3,5benzenetriyl)tris(methylene)]tris[N'-(1,1,3,3-tetramethylbutyl)- (CA
INDEX NAME)

IT 828931-50-6P

(new tripodal receptor for mol. recognition of monosaccharides a paradigm for assessing glycoside binding affinities and selectivities by h NMR spectroscopy)

RN 828931-50-6 HCAPLUS

CN Urea, N,N'',N'''-[(2,4,6-triethyl-1,3,5-benzenetriyl)tris(methylene)]tris[N'-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

CC 33-7 (Carbohydrates)

Section cross-reference(s): 6, 22, 25

IT 149525-65-5P 181058-08-2P 828931-45-9P 828931-46-0P (new tripodal receptor for mol. recognition of monosaccharides a paradigm for assessing glycoside binding affinities and selectivities by h NMR spectroscopy)

IT 828931-47-1P 828931-48-2P 828931-49-3P 828931-50-6P (new tripodal receptor for mol. recognition of monosaccharides a paradigm for assessing glycoside binding affinities and selectivities by h NMR spectroscopy)

OS.CITING REF COUNT: 53 THERE ARE 53 CAPLUS RECORDS THAT CITE THIS RECORD (54 CITINGS)

REFERENCE COUNT: 69 THERE ARE 69 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 6 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2002:160213 HCAPLUS Full-text DOCUMENT NUMBER: 136:205226

TITLE: Heat-resistant oil gel-type fragrance compositions INVENTOR(S): Shimizu, Hiroshi; Kuriki, Yoshihiro; Taniguchi,

Yasuo; Fukuda, Kiyoshi PATENT ASSIGNEE(S): Taiyo Corporation, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| | | | | |
| JP 2002065826 | A | 20020305 | JP 2000-261404 | 20000830 |
| | | | | |

20000830 PRIORITY APPLN. INFO.: JP 2000-261404

<--

ED Entered STN: 05 Mar 2002

AΒ The compns. contain hydrogenated castor oil and/or 12-hydroxystearic acid, paraffin waxes, fatty amides and/or substituted ureas, volatile hydrocarbons, and fragrances. Hydrogenated castor oil 9.0, FT 100 (paraffin wax) 2.5, Slipacks E (fatty amide) 2.0, d-limonene 83.5, and lemon fragrance 3.0 g were mixed to give a gel showing m.p. 65°.

65792-44-1, Hackreen SX ΙT

(heat-resistant oil gel-type fragrance compns.)

65792-44-1 HCAPLUS RN

Urea, N-octadecyl-N'-[[4-CN

> [[[(octadecylamino)carbonyl]amino]methyl]phenyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_2\text{--NH-} \overset{\circ}{\text{C}}\text{--NH-} (\text{CH}_2)_{17}\text{--Me} \\ \\ \text{Me--} (\text{CH}_2)_{17}\text{--NH--} \overset{\circ}{\text{C}}\text{--NH--} \text{CH}_2 \end{array}$$

IC ICM A61L009-01

ICS C08K005-01; C08K005-09; C08K005-20; C08K005-21; C08L091-00; C08L091-06

62-5 (Essential Oils and Cosmetics)

TТ 106-14-9, 12-Hydroxystearic acid 110-30-5, Slipacks E 5989-27-5 65792-44-1, Hackreen SX

(heat-resistant oil gel-type fragrance compns.)

L53 ANSWER 7 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN 2001:739615 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 136:53496

TITLE: Thermodynamic Aspects of Dicarboxylate Recognition

by Simple Artificial Receptors

AUTHOR(S): Linton, Brian R.; Goodman, M. Scott; Fan, Erkang;

Van Arman, Scott A.; Hamilton, Andrew D.

CORPORATE SOURCE: Departments of Chemistry and Molecular Biophysics

and Biochemistry, Yale University, New Haven, CT,

06520-8107, USA

SOURCE: Journal of Organic Chemistry (2001),

66(22), 7313-7319

CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 136:53496

ED Entered STN: 11 Oct 2001

Recognition of dicarboxylates by bis-functional hydrogen-bonding receptors AB displays divergent thermodn. in different solvent systems. NMR titration and isothermal titration calorimetry indicated that neutral bis-urea and bisthiourea receptors form exothermic complexes with dicarboxylates in DMSO, with a near zero entropic contribution to binding. The increased binding strength of bis-quanidinium receptors precluded quant. measurement of binding consts. in DMSO, but titration calorimetry offered a qual. picture of the association Formation of these 1:1 complexes was also exothermic, but addnl. endothermic events occurred at both lower and higher host-quest ratios. These events indicated multiple binding equilibrium but did not always occur at a discrete 2:1 or 1:2 host-guest molar ratio, suggesting higher aggregates. With increasing amts. of methanol as solvent, bis-quanidinium receptors form more endothermic complexes with dicarboxylates, with a favorable entropy of association This switch from association driven by enthalpy to one driven by entropy may reflect a change from complexation involving the formation of hydrogen bonds to that promoted by solvent liberation from binding sites. 382162-97-2 ΙT

(thermodn. aspects of dicarboxylate recognition by simple artificial receptors)

RN 382162-97-2 HCAPLUS

CN Pentanedioic acid, ion(2-), compd. with
 N,N''-[1,4-phenylenebis(methylene)]bis[N'-butylurea] (1:1) (9CI) (CA
 INDEX NAME)

CM 1

CRN 145509-78-0 CMF C18 H30 N4 O2

CM 2

CRN 56-16-6 CMF C5 H6 O4

-02C- (CH2)3-CO2-

IT 145509-78-0P

RN 145509-78-0 HCAPLUS

CN Urea, N,N''-[1,4-phenylenebis(methylene)]bis[N'-butyl- (9CI) (CA INDEX NAME)

CC 22-13 (Physical Organic Chemistry)

IT 382162-97-2 382162-99-4 382163-01-1 382163-03-3

382163-04-4 382163-05-5 382163-06-6 382163-07-7

(thermodn. aspects of dicarboxylate recognition by simple artificial receptors)

145509-78-0P 145509-79-1P 145703-30-6P 229311-99-3P,

 $1, 3, 4, 6, 7, 8- \\ Hexahydro- \\ 2H-pyrimido \\ [1, 2-a] pyrimidine tetraphenylborate$

(thermodn. aspects of dicarboxylate recognition by simple

artificial receptors)

OS.CITING REF COUNT: 78 THERE ARE 78 CAPLUS RECORDS THAT CITE THIS

RECORD (80 CITINGS)

REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L53 ANSWER 8 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2001:477398 HCAPLUS Full-text

DOCUMENT NUMBER: 135:62409

TITLE: Polyolefin-based agricultural films and laminated

agricultural films having excellent durability

INVENTOR(S): Machida, Toshimi; Takano, Tadahiro

PATENT ASSIGNEE(S): Achilles Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

TΤ

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| | | | | |
| JP 2001178278 | A | 20010703 | JP 1999-363547 | 19991222 |
| | | | < | |
| JP 4256046 | В2 | 20090422 | | |
| PRIORITY APPLN. INFO.: | | | JP 1999-363547 | 19991222 |
| | | | | |

ED Entered STN: 03 Jul 2001

The films comprise polyolefins 100, urea-based lubricants 0.001-3, and F-containing compds. 0.01-3 parts. The laminated films have layers of above films at least on outsides of greenhouses. Thus, a composition for an outer layer contained LDPE (Sumikathene F 200) 60, LLDPE (Sumikathtene Alpha-FZ 225-1) 40, SiO2-type lubricant (Minsil 5) 0.3, a UV absorber (Viosorb 520) 0.1, glycerin stearate 2, a light stabilizer (Chimassorb 944) 0.4, a F compound (Unidyne DS 403) DS 403 0.1, and a urea-based lubricant (Hackreen SX) 3 part. It was coextruded with an EVA (Evatate H 2081) composition for an intermediate layer and an EVA (Evatate D 2011) composition for an inner layer to give a 3-

layered laminated film. A greenhouse covered with the film had no scratch by mica wires and good antifogging property after 12 and 3 mo, resp.

IT 65792-44-1, Hackreen SX

(durable polyolefin agricultural films containing F compds. and urea-type lubricants and their laminated films)

RN 65792-44-1 HCAPLUS

CN Urea, N-octadecyl-N'-[[4-

[[[(octadecylamino)carbonyl]amino]methyl]phenyl]methyl]- (CA INDEX NAME)

IC ICM A01G009-14

ICS A01G013-02; C08J005-18; C08K005-02; C08K005-21; C08L023-00

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 5

IT 65792-44-1, Hackreen SX 148919-89-5, Unidyne DS 403 (durable polyolefin agricultural films containing F compds. and urea-type lubricants and their laminated films)

L53 ANSWER 9 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1998:632414 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 129:302350

ORIGINAL REFERENCE NO.: 129:61671a,61674a

TITLE: Novel Self-Assembly of m-Xylylene Type Dithioureas

by Head-to-Tail Hydrogen Bonding

AUTHOR(S): Tobe, Yoshito; Sasaki, Shin-ichi; Mizuno, Masaaki;

Hirose, Keiji; Naemura, Koichiro

CORPORATE SOURCE: Department of Chemistry Faculty of Engineering

Science, Osaka University, Toyonaka Osaka, 560,

Japan

SOURCE: Journal of Organic Chemistry (1998),

63(21), 7481-7489

CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 129:302350

ED Entered STN: 08 Oct 1998

GΙ

$$t-Bu$$

$$H \longrightarrow H - R$$

$$H \longrightarrow H - R$$

$$U \longrightarrow H - R$$

$$U \longrightarrow H - R$$

$$U \longrightarrow H - R$$

Dithiourea I (R = n-Bu) self-assembles to form an orthogonal dimer structure AΒ both in solution and in the solid state, wherein the four thiourea groups establish a closed network of hydrogen bonds through a head-to-tail binding mode. This novel dimer structure was elucidated on the basis of 1 H NMRspectra, vapor pressure osmometry, and X-ray crystal structure anal. Furthermore, a series of m-xylylene type dithioureas were synthesized and their dimerization consts. (Ka) in CDC13 were determined by dilution expts. using 1H ${\tt NMR}$ spectroscopy. The magnitude of the Ka values are dependent on the steric bulk of the side chains, the acidity of the thiourea groups, and the weak intermol. interaction between the benzene rings of the side chains and the m-xylylene spacer.

ΙT 214400-75-6P

> (novel self-assembly of m-xylylene type dithioureas by head-to-tail hydrogen bonding)

214400-75-6 HCAPLUS RN

Urea, N,N''-[[5-(1,1-dimethylethyl)-1,3-CN phenylene]bis(methylene)]bis[N'-butyl- (9CI) (CA INDEX NAME)

CC 22-12 (Physical Organic Chemistry)

Section cross-reference(s): 75

ΙT Crystal structure

IR spectra

Molecular structure

NMR (nuclear magnetic resonance)

Self-assembly

(novel self-assembly of m-xylylene type dithioureas by head-to-tail hydrogen bonding)

TT 214400-73-4P 214400-74-5P 214400-75-6P 214400-76-7P

> (novel self-assembly of m-xylylene type dithioureas by head-to-tail hydrogen bonding)

OS.CITING REF COUNT: THERE ARE 19 CAPLUS RECORDS THAT CITE THIS 19

RECORD (20 CITINGS)

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L53 ANSWER 10 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1998:23594 HCAPLUS Full-text

128:175425 DOCUMENT NUMBER:

ORIGINAL REFERENCE NO.: 128:34433a,34436a

Application of a bis-thiourea ionophore for an TITLE:

anion selective electrode with a remarkable

sulfate selectivity

Nishizawa, Seiichi; Buhlmann, Philippe; Xiao, Kang AUTHOR(S):

Ping; Umezawa, Yoshio

CORPORATE SOURCE: School of Science, Department of Chemistry, The

University of Tokyo, 113, Japan

SOURCE: Analytica Chimica Acta (1998), 358(1),

35 - 44

CODEN: ACACAM; ISSN: 0003-2670

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 16 Jan 1998

Anion-selective solvent polymeric membrane electrodes based on H bond-forming, AΒ neutral ionophores with two urea or thiourea groups bridged by a m-xylylene unit are described. The use of α , α '-bis(N'-phenylthioureylene)-m-xylene results in ion-selective electrodes with a remarkable selectivity for sulfate. An electrode with this compound as ionophore, poly(vinyl chloride) (PVC) as polymeric matrix, 2-nitrophenyl octyl ether (o-NPOE) as plasticizer and cationic sites (50 mol relative to the ionophore) responds to sulfate in a Nernstian manner in the concentration range from 10-6 to 10-2 M. In comparison to conventional anion-exchanger electrodes, the interference of SCN-, NO3-, Br-, and Cl- is significantly reduced, as shown by the selectivity coeffs. determined with the matched potential method in the sulfate concentration range 1.0-10 mM (log Kpotsulfate, B: SCN-, +2.9; NO3-, +1.6; Br-, +1.1; Cl-, -0.1). The present electrode has a higher selectivity for sulfate than any previously reported ionophore-based ion-selective electrode. No significant changes in the detection limit and response slope were observed when the electrode was stored for 28 days in an aqueous buffer solution TΤ 36966-14-0 202842-64-6

(ionophore; application of a bis-thiourea ionophore for an anion selective electrode with a remarkable sulfate selectivity)

RN 36966-14-0 HCAPLUS

RN 202842-64-6 HCAPLUS

CN Urea, N,N''-[1,3-phenylenebis(methylene)]bis[N'-heptadecyl- (9CI) (CA INDEX NAME)

CC 79-2 (Inorganic Analytical Chemistry)

Section cross-reference(s): 72

IT 36966-14-0 37042-60-7 37042-63-0 **202842-64-**6

(ionophore; application of a bis-thiourea ionophore for an anion selective electrode with a remarkable sulfate selectivity)

OS.CITING REF COUNT: 68 THERE ARE 68 CAPLUS RECORDS THAT CITE THIS

RECORD (68 CITINGS)

REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L53 ANSWER 11 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:579734 HCAPLUS Full-text

DOCUMENT NUMBER: 125:198313

ORIGINAL REFERENCE NO.: 125:37101a,37104a

TITLE: Rubber compositions and automobile stabilizer

bushes molded thereof

INVENTOR(S): Utsugi, Hiroyuki; Nomura, Satoshi; Fujii, Noriki

PATENT ASSIGNEE(S): Kinugawa Rubber Ind, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| | | | | |
| JP 08169984 | A | 19960702 | JP 1994-314379 | 19941219 |
| | | | < | |
| PRIORITY APPLN. INFO.: | | | JP 1994-314379 | 19941219 |

ED Entered STN: 28 Sep 1996

AB The compns. with low friction noise contain 10-30 phr R1NHCONHR2(NHCONHR3)n (I; R1-3 = alkyl, aryl; n = 0, 1). Thus, a stabilizer bush prepared by vulcanizing a composition of natural rubber 70, butadiene rubber 30, ZnO 5, stearic acid 1, an antioxidant 5, I (R1, R2 = C18H37; n = 0) 30, carbon black 70, a vulcanizing accelerator 1.5, and S 3.0 parts showed low squeeze friction, no friction noise, and high hardness at 80°.

IT 104241-95-4

(urea derivative-containing rubbers for automobile stabilizer bushes with reduced noise and high hardness at high temperature)

RN 104241-95-4 HCAPLUS

CN Urea, N,N''-[1,3-phenylenebis(methylene)]bis[N'-octadecyl- (9CI) (CA INDEX NAME)

IC ICM C08L021-00

ICS C08J005-10

CC 39-15 (Synthetic Elastomers and Natural Rubber)

IT 4051-66-5 4128-43-2 91835-71-1 103522-96-9 104241-95-4

(urea derivative-containing rubbers for automobile stabilizer bushes with reduced noise and high hardness at high temperature)

L53 ANSWER 12 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1996:315723 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 125:57528

ORIGINAL REFERENCE NO.: 125:11061a,11064a

TITLE: S,S-Dimethyl Dithiocarbonate: A Convenient Reagent

for the Synthesis of Symmetrical and Unsymmetrical

Ureas

AUTHOR(S): Leung, Man-kit; Lai, Jun-Liang; Lau, Jing-Hang;

Yu, Hsiao-hua; Hsiao, Hsiang-Ju

CORPORATE SOURCE: Department of Chemistry, National Taiwan

University, Taipei, Taiwan

SOURCE: Journal of Organic Chemistry (1996),

61(12), 4175-4179

CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 125:57528

ED Entered STN: 31 May 1996

AΒ S,S-Di-Me dithiocarbonate (DMDTC) reacts selectively with primary aliphatic amines in methanol to give sym. ureas in high yield. No incorporation of methanol was detected. However, primary aliphatic amines bearing hydroxy or amino substituents at the β or γ position cyclize in dilute solution to provide predominantly cyclic ureas or carbamates. In order to expand the application using DMDTC to the synthesis of unsym. ureas, we examined the reaction of benzylamine with excess DMDTC (1.6 molar equivalents) which results in the formation of N-benzyl-S-Me thiocarbamate (36) and dibenzylurea (6) in a ratio of 1:30. This result implies that the formation of dibenzylurea (6) at the second stage of the reaction is faster than N-benzyl-S-Me thiocarbamate (36) formation from DMDTC. To prevent the thiocarbamate 36 from further reacting with dibenzylurea, we carried out the reaction under basic conditions, such that 36 is deprotonated immediately after being formed. Since the corresponding N-benzyl-S-Me thiocarbamate N-anion is relatively stable towards nucleophilic substitution at ambient temperature and would not react further to give dibenzylurea (6), quenching of the anion led to thiocarbamate 36 in high yield. Further condensation of 36 with tetrahydrofurfurylamine furnished the unsym. urea PhCH2NHCONHCH2R (R = 2tetrahydrofuryl). This synthetic strategy is extended to the preparation of bisureas, a new class of guest-host mols. that has been developed recently for mol. recognition.

IT 178171-99-8P

(preparation of sym. and unsym. ureas by reaction of S, S-di-Me dithiocarbonate and amines)

RN 178171-99-8 HCAPLUS

CN Urea, N,N''-[1,4-phenylenebis(methylene)]bis[N'-(2-methylpropyl)-(9CI) (CA INDEX NAME)

CC 21-2 (General Organic Chemistry)

IT 120-93-4P, 2-Imidazolidinone 497-25-6P, 2-Oxazolidinone 869-79-4P 1189-23-7P, N,N'-Diisobutylurea 1466-67-7P, N,N'-Dibenzylurea 1801-72-5P, N,N'-Diallylurea 1852-18-2P 2387-23-7P, N,N'-Dicyclohexylurea 3012-97-3P 5259-97-2P 7517-99-9P 15438-70-7P 17496-93-4P 24572-33-6P 36966-17-3P 42329-17-9P

66655-67-2P 71466-11-0P 178171-96-5P 178171-97-6P 178171-98-7P 178171-99-8P 178172-00-4P

(preparation of sym. and unsym. ureas by reaction of S,S-di-Me dithiocarbonate and amines)

OS.CITING REF COUNT: 44 THERE ARE 44 CAPLUS RECORDS THAT CITE THIS RECORD (44 CITINGS)

L53 ANSWER 13 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1995:794628 HCAPLUS Full-text

DOCUMENT NUMBER: 123:313318

ORIGINAL REFERENCE NO.: 123:56151a,56154a

TITLE: Anion recognition by urea and thiourea groups:

remarkably simple neutral receptors for dihydrogen

phosphate

AUTHOR(S): Nishizawa, Seiichi; Buehlmann, Philippe; Iwao,

Masatoshi; Umezawa, Yoshio

CORPORATE SOURCE: School Science, University Tokyo, Tokyo, 113,

Japan

SOURCE: Tetrahedron Letters (1995), 36(36),

6483-6

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 15 Sep 1995

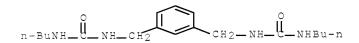
AB A bis-urea and a bis-thiourea host, both derived in only one step from 1,3-bis(aminomethyl)benzene, are shown to bind dihydrogen phosphate selectively over various other anions (H2PO4- > CH3COO- > Cl- > HSO4= > NO3- > ClO4-). The much stronger binding of H2PO4- by the bis-thiourea is rationalized by the stronger H-bond donor strength of the thiourea groups and the binding selectivity is explained in terms of the complex geometry and the basicity of the guest anions. The lack of self-association and the changes in the UV spectrum upon complexation make bis-thiourea hosts a promising new class of neutral receptors for dihydrogen phosphate.

IT 36966-14-0P

(anion recognition by urea and thiourea groups in simple neutral receptors for dihydrogen phosphate)

RN 36966-14-0 HCAPLUS

CN Urea, N,N''-[1,3-phenylenebis(methylene)]bis[N'-butyl- (9CI) (CA INDEX NAME)



CC 22-12 (Physical Organic Chemistry)

IT 36966-14-0P 37042-60-7P

(anion recognition by urea and thiourea groups in simple neutral receptors for dihydrogen phosphate)

OS.CITING REF COUNT: 131 THERE ARE 131 CAPLUS RECORDS THAT CITE THIS RECORD (131 CITINGS)

L53 ANSWER 14 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1995:650439 HCAPLUS Full-text

DOCUMENT NUMBER: 123:171481

ORIGINAL REFERENCE NO.: 123:30613a,30616a

TITLE: Polyamides containing amides with good

mold release property

INVENTOR(S): Karasawa, Hiroo; Umetsu, Hideyuki; Iwamoto,

Masaaki

PATENT ASSIGNEE(S): Toray Industries, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| | | | | |
| JP 07082475 | A | 19950328 | JP 1993-225628 | 19930910 |
| | | | < | |
| JP 3407349 | В2 | 20030519 | | |
| PRIORITY APPLN. INFO.: | | | JP 1993-225628 | 19930910 |

OTHER SOURCE(S): MARPAT 123:171481

ED Entered STN: 01 Jul 1995

The compns. having improved mech. properties contain 100 parts polyamides and 0.005-10 parts R1CONH(R3NHCOR4CONH)nR3NHCOR2 (R1, R2 = C5-35 hydrocarbyl substituted by ≥1 OH group; R3, R4 = C1-12 hydrocarbylene; n = 0-5). Thus, 100 parts nylon 6 and 0.01 part

C6H13CH(OH)C10H2OCONH(CH2)2NHCOC10H2OCH(OH)C6H13 were dry-blended and

<--

C6H13CH(OH)C10H20CONH(CH2)2NHCOC10H20CH(OH)C6H13 were dry-blended and injection-molded to give moldings with good mold release property.

IT 104241-95-4

(additives; polyamides containing amides with good \mathfrak{mold} release property and mech. properties)

RN 104241-95-4 HCAPLUS

CN Urea, N,N''-[1,3-phenylenebis(methylene)]bis[N'-octadecyl- (9CI) (CA INDEX NAME)

- IC ICM C08L077-00
 - ICS C08K003-26; C08K003-34; C08K005-10; C08K005-20
- CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 38

- ST polyamide amide mold release agent; nylon molding release agent
- IT Kaolin, uses

Mica-group minerals, uses

(additives; polyamides containing amides with good mold release property and mech. properties)

IT Parting materials

(polyamides containing amides with good mold release property and mech. properties)

IT Amides, uses

(polyamides containing amides with good mold release property and mech. properties)

IT Polyamides, uses

(polyamides containing amides with good mold release property and mech. properties)

IT 471-34-1, Calcium carbonate, uses 637-12-7 6865-35-6 14807-96-6, Talc, uses 60768-10-7 65792-46-3 74388-22-0 104241-95-4

(additives; polyamides containing amides with good mold release property and mech. properties)

IT 123-26-2 55349-01-4 128554-52-9 167308-45-4 167308-46-5 (polyamides containing amides with good mode release property and mech. properties)

IT 9008-66-6, Nylon 610 9011-52-3, Hexamethylenediamine-sebacic acid copolymer 25038-54-4, Nylon 6, uses 25776-72-1, Nylon 6T66 32131-17-2, Nylon 66, uses

(polyamides containing amides with good mold release property and mech. properties)

L53 ANSWER 15 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1995:480214 HCAPLUS $\underline{Full-text}$

DOCUMENT NUMBER: 122:241421

ORIGINAL REFERENCE NO.: 122:44127a,44130a

TITLE: Thermoplastic compositions with good

moldability and resistance to heat and

impact

INVENTOR(S): Nishihara, Hajime; Maeda, Katsuaki

PATENT ASSIGNEE(S): Asahi Chemical Ind, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|--------------------|----------|
| JP 06220332 | А | 19940809 | JP 1993-13227 | 19930129 |
| PRIORITY APPLN. INFO.: | | | < JP 1993-13227 | 19930129 |

ED Entered STN: 12 Apr 1995

AB The title compns. comprise (A) thermoplastic resins, (B) compds. containing hydroxyaryl phosphate ester groups, and (C) higher fatty acids or their esters and amides, higher aliphatic alcs., metal soaps and aliphatic hydrocarbons as processing aids provided that the absolute differences $\Delta S1$, $\Delta S2$ and $\Delta S3$ in solubility parameters (SP values; [cal/cm3]0.5) of A and B, B and C and A are $1.0 \le \Delta S1 \le 2.0$, $0 \le \Delta S2 \le 2.5$, and

 $0.5 \le \Delta S3 \le 4.5$, resp. A molding composition comprised (A) 100 parts a 71:29 mixture of high-impact polystyrene and a polyoxyphenylene-polystyrene 70/30 blend, (B) 12 parts a 54.2/18.3/27.5 mixture of di-Ph resorcinyl phosphate (I), Ph3PO4 (II) and Z(OPO3Ph)2 (Z = 1,3-phenylene) (III), and (C) 2.4 parts ethylenebis(12-hydroxy)stearamide (IV) where the SP values of A component, I, II, III, and IV were 10.0, 11.8, 10.7, 10.8 and 10.9, resp.

IT 65792-44-1, Hackreen SX

(thermoplastic compns. with good moldability and resistance to heat and impact)

RN 65792-44-1 HCAPLUS

CN Urea, N-octadecyl-N'-[[4-

[[[(octadecylamino)carbonyl]amino]methyl]phenyl]methyl]- (CA INDEX NAME)

```
IC
     ICM C08L101-00
     ICS
         C08K005-01; C08K005-05; C08K005-09; C08K005-10; C08K005-20;
          C08K005-521
CC
     37-6 (Plastics Manufacture and Processing)
     polyoxyphenylene polystyrene blend moldability; impact
     resistance thermoplastic blend molding; heat resistance
     thermoplastic blend molding; phosphate ester stabilizer
     thermoplastic molding compn; ethylenebishydroxystearamide
     processing aid thermoplastic molding; metal soap processing
     aid molding; alc higher processing aid molding;
     aliph fatty acid processing aid
ΙT
    Alcohols, uses
     Amides, uses
     Esters, uses
     Fatty acids, uses
     Paraffin oils
     Soaps
        (thermoplastic compns. with good moldability and
        resistance to heat and impact)
     Plastics, molded
ΤТ
     Polyoxyphenylenes
        (thermoplastic compns. with good moldability and
        resistance to heat and impact)
TT
     16099-54-0, p-Phenylenebisstearamide
        (Alflow AD-618; thermoplastic compns. with good moldability
        and resistance to heat and impact)
ΤТ
     109-23-9, Methylenebisstearamide
        (Bisamid LA; thermoplastic compns. with good moldability
        and resistance to heat and impact)
     22214-23-9
ΤТ
        (Hackreen SH; thermoplastic compns. with good moldability
        and resistance to heat and impact)
TT
     162293-96-1, Diphenylmethanebisstearylurea
        (Hackreen SM; thermoplastic compns. with good moldability
        and resistance to heat and impact)
ΙT
     91835-71-1
        (Hackreen ST; thermoplastic compns. with good moldability
        and resistance to heat and impact)
     9016-45-9, Polyethylene glycol monononylphenyl ether
ΙT
        (Nonion NS-270; thermoplastic compns. with good moldability
        and resistance to heat and impact)
ΙT
     17832-30-3, Ethylenebiscaprylamide
        (Slipacks C; thermoplastic compns. with good moldability
        and resistance to heat and impact)
ΙT
     25151-31-9, N,N'-Distearyladipamide
        (Slipacks ZSA; thermoplastic compns. with good moldability
        and resistance to heat and impact)
     149696-77-5
ΙT
        (Unister 176K; thermoplastic compns. with good moldability
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and resistance to heat and impact)

IT 17671-27-1, Behenyl behenate
(Unister M-2222SL; thermoplastic compns. with good
moldability and resistance to heat and impact)

ΙT 57-11-4, Octadecanoic acid, uses 69-65-8, Mannitol 80-05-7, uses 80-05-7D, esters with methylphenols and phosphoric acid, oligomers 108-46-3D, 1,3-Benzenediol, phosphate esters, oligomers 108-95-2D, Phenol, phosphate esters, oligomers 110-31-6, Alflow AD 281 115-83-3, Unister H-476 115-86-6, Triphenyl phosphate 123-26-2D, Slipacks H, esters with bisphenol A and phosphoric acid, oligomers 1319-77-3D, Cresol, esters with bisphenol A and phosphoric acid, 7003-56-7, Slipacks L 7664-38-2D, Phosphoric acid, oligomers esters with phenols and resorcinol, oligomers 9005-08-7, Nissan 32492-61-8, Uniol DA-350F 51018-99-6D, Novacid P, Nonion DS-60HN esters with bisphenol A and phosphoric acid, oligomers 57583-54-7, Resorcinol bis(diphenyl phosphate) 65792-44-1, Hackreen SX 93981-32-9, CR741C 105937-68-6 125437-37-8 130293-42-4, Uniqly GS-106

(thermoplastic compns. with good moldability and resistance to heat and impact)

IT 9003-07-0, Polypropylene 9003-53-6, Polystyrene 9003-56-9, Stylac 120B 24938-67-8, 2,6-Xylenol polymer, sru 25134-01-4, 2,6-Xylenol polymer 143289-85-4, Butadiene- α -methylstyrene dimer-styrene graft copolymer

(thermoplastic compns. with good moldability and resistance to heat and impact)

L53 ANSWER 16 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1995:308884 HCAPLUS Full-text

DOCUMENT NUMBER: 122:239868

ORIGINAL REFERENCE NO.: 122:43849a,43852a

TITLE: Insertion of Isocyanates, CO2, and Ethylene Carbonate into the Zr-C and Zr-N Bonds of Imine

Complexes. Construction of Chiral Centers Like

Those in α -Amino Acids

AUTHOR(S): Gately, Daniel A.; Norton, Jack R.; Goodson,

Patricia A.

CORPORATE SOURCE: Department of Chemistry, Colorado State

University, Fort Collins, CO, 80523, USA

SOURCE: Journal of the American Chemical Society (

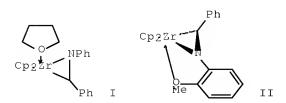
1995), 117(3), 986-96

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 24 Jan 1995

GΙ



AΒ In some cases zirconocene-imine complexes insert CO2; more generally they insert isocyanates and cyclic carbonates. Isocyanates can insert into either the Zr-C or the Zr-N bond; protonolysis of the zirconacycle resulting from Zr-C insertion gives an amide, whereas protonolysis of the zirconacycle resulting from Zr-N insertion gives a urea. Steric hindrance on the imine nitrogen or the isocyanate discourages insertion into the Zr-N bond and gives clean Zr-C insertion. The mol. structure of an N-Ph imine complex I has been determined by single-crystal x-ray diffraction. A coordination THF in I exchanges with free THF by a dissociative mechanism. Coordination of isocyanates to the Zr of I has not been observed before their insertion. The isocyanate insertion reactions of imine complexes such as, e.g. I, are irreversible. A chelating o-methoxy substituent on the N-Ph of an imine complex II also prevents insertion into the Zr-N bond and gives clean Zr-C insertion. The treatment of II with ethylene carbonate gives a spirocyclic complex; methanolysis of which in benzene gives the Me ester of phenylglycine. A crossover experiment suggests that the free β -hydroxyethyl ester is an intermediate in the benzene methanolysis of spirocyclic complex.

IT 71819-34-6P

(preparation of)

RN 71819-34-6 HCAPLUS

CN Urea, N-(1-methylethyl)-N'-(phenylmethyl)- (CA INDEX NAME)

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CC 29-10 (Organometallic and Organometalloidal Compounds)
    Section cross-reference(s): 22, 25, 75
ST insertion isocyanate zirconium carbon nitrogen bond; ethylene
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carbonate insertion zirconium carbon nitrogen; amino acid chiral center contg; crystal mol structure zirconocene imine heterocycle

IT Crystal structure
Molecular structure

(of zirconocene imine heterocyclic complex)

1467-21-6P 6648-19-7P 6648-21-1P 64464-76-2P ΙT 71819-34-6P 112162-59-1P 131699-28-0P 161944-55-4P 161944-56-5P 161944-58-7P 161944-57-6P 161944-59-8P 161944-60-1P 161944-61-2P 161944-62-3P 161944-63-4P 161944-64-5P 161944-65-6P 161944-66-7P 161944-67-8P 161944-68-9P 161944-69-0P 161944-71-4P 161944-73-6P 161944-74-7P 161944-75-8P 161944-76-9P 161944-77-0P 162194-84-5P 161944-78-1P 162194-83-4P 162194-85-6P 162231-13-2P

(preparation of)

OS.CITING REF COUNT: 30 THERE ARE 30 CAPLUS RECORDS THAT CITE THIS RECORD (32 CITINGS)

L53 ANSWER 17 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1994:535559 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 121:135559

ORIGINAL REFERENCE NO.: 121:24521a,24524a

TITLE: Polyamide compositions containing bisureas for

moldings

INVENTOR(S): Nishimura, Tooru; Karasawa, Hiroo; Iwamoto,

Masaaki

PATENT ASSIGNEE(S): Toray Industries, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| | | | | |
| JP 05320501 | A | 19931203 | JP 1992-124854 | 19920518 |
| | | | < | |

PRIORITY APPLN. INFO.: JP 1992-124854 19920518

<--

ED Entered STN: 17 Sep 1994

AB Polyamides containing 0.001-10% bisurea R2NHCONHR1NHCONHR3 (R1 = divalent hydrocarbyl; R2-3 = C9-40 aliphatic hydrocarbyl) and 0.005-5% Ba stearate (I) have good melt flow and mold release properties and give moldings with good appearance, stiffness, and strength. Nylon 6 containing 0.3% [Me(CH2)17NHCONH-p-C6H4]2CH2 and 0.4% I gave injection moldings showing tensile strength 920 kg/cm2, elongation 200%, flexural modulus 31,000 kg/cm2, and good dimensional stability.

IT 104241-95-4

(polyamides containing, for injection molding with short cycle time)

RN 104241-95-4 HCAPLUS

- IC ICM C08L077-00
 - ICS C08K005-09; C08K005-21
- CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 38

- ST polyamide urea deriv injection molding; mold release polyamide urea deriv; bisurea compd polyamide injection molding; barium stearate polyamide injection molding; soap barium polyamide injection molding; polycaprolactam urea deriv injection molding
- IT Polyamides, uses

(injection molding of, containing urea derivative and barium stearate, with short cycle time)

IT Soaps

(barium, polyamides containing, for injection molding with short cycle time)

IT Molding apparatus for plastics and rubbers

(injection, release agents for, for polyamides)

IT 25038-54-4, Nylon 6, uses 32131-17-2, Nylon 66, uses (injection molding of, containing urea derivative and barium stearate, with short cycle time)

IT 6865-35-6, Barium stearate 22214-23-9 43136-14-7 103522-96-9 104241-95-4 157189-33-8

(polyamides containing, for injection molding with short cycle time)

L53 ANSWER 18 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1994:164869 HCAPLUS Full-text

DOCUMENT NUMBER: 120:164869

ORIGINAL REFERENCE NO.: 120:29119a,29122a

TITLE: Synthetic analogs of the ristocetin binding site:

neutral, multidentate receptors for carboxylate

recognition

AUTHOR(S): Albert, Jeffrey S.; Hamilton, Andrew D.

CORPORATE SOURCE: Dep. Chem., Univ. Pittsburgh, Pittsburgh, PA,

15260, USA

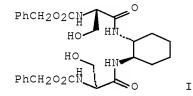
SOURCE: Tetrahedron Letters (1993), 34(46),

7363-6

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 02 Apr 1994

GΙ



AB A new family of receptors for carboxylates has been developed based on the multidentate recognition strategy of ristocetin. Particularly strong binding is seen with receptors that employ hydroxyl binding sites. Thus, L-serine-containing multidentate receptor I has a binding constant Ka = 2.7 + 105 with Bu4NOAc in CD3CN.

IT 36966-14-0P

(preparation and binding with tetrabutylammonium acetate, as synthetic ristocetin binding pocket analog)

RN 36966-14-0 HCAPLUS

CN Urea, N,N''-[1,3-phenylenebis(methylene)]bis[N'-butyl- (9CI) (CA INDEX NAME)

n-Bunh CH2 NH_CH2 CH2-NH_C-NHBu-n

CC 34-3 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 22

IT 22559-13-3P 36966-14-0P 153281-56-2P 153281-57-3P

153281-58-4P 153281-59-5P

(preparation and binding with tetrabutylammonium acetate, as synthetic ristocetin binding pocket analog)

OS.CITING REF COUNT: 25 THERE ARE 25 CAPLUS RECORDS THAT CITE THIS RECORD (26 CITINGS)

L53 ANSWER 19 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1993:80425 HCAPLUS Full-text

DOCUMENT NUMBER: 118:80425

ORIGINAL REFERENCE NO.: 118:14133a,14136a

TITLE: Molecular recognition: hydrogen-bonding receptors

that function in highly competitive solvents

AUTHOR(S): Fan, Erkang; Van Arman, Scott A.; Kincaid, Scott;

Hamilton, Andrew D.

CORPORATE SOURCE: Mater. Res. Cent., Univ. Pittsburgh, Pittsburgh,

PA, 15260, USA

SOURCE: Journal of the American Chemical Society (

1993), 115(1), 369-70

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 02 Mar 1993

AB Simple synthetic receptors have been developed that function via directed hydrogen bonding interactions in highly competitive solvents. For example, a mol. containing two urea sites separated by a p-xylylene spacer binds to glutarate derivs. in DMSO via four hydrogen bonds and with an association constant of 6.4 ± 0.4 + 102 M-1. Strong binding of this type in polar solvents may be due to a number of factors including favorable secondary hydrogen bonding interactions between the carboxylate and urea, the use of charged H-bond acceptors, an inefficient solvation of the closely spaced H-bond donor sites in the urea, and an entropically favorable release of solvent and/or counterion mols. on complex formation. An enhancement of these factors can be achieved in a receptor containing two alkylguanidinium groups in place of the ureas. This binds very strongly to glutarate even in aqueous DMSO. The association constant was >5 + 104 M-1 in neat DMSO, 8.5 ± 1.5 + 103 M-1 in 12% aqueous DMSO and 4.8 ± 2.5 + 102 M-1 in 25% aqueous DMSO.

IT 145509-78-0

(hydrogen bonding of, with glutarate)

RN 145509-78-0 HCAPLUS

CN Urea, N,N''-[1,4-phenylenebis(methylene)]bis[N'-butyl- (9CI) (CA INDEX NAME)

CC 22-13 (Physical Organic Chemistry)

Section cross-reference(s): 1

IT 145509-78-0 145509-79-1 145703-30-6

(hydrogen bonding of, with glutarate)

OS.CITING REF COUNT: 294 THERE ARE 294 CAPLUS RECORDS THAT CITE THIS

RECORD (300 CITINGS)

L53 ANSWER 20 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1991:73874 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 114:73874

ORIGINAL REFERENCE NO.: 114:12397a,12400a

TITLE: Composition for plastic magnet

INVENTOR(S): Yokokita, Masahiko; Kitagawa, Takeshi

PATENT ASSIGNEE(S): Ube Nitto Kasei Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| | | | | |
| JP 02211604 | А | 19900822 | JP 1989-33079 | 19890213 |

PRIORITY APPLN. INFO.: JP 1989-33079 19890213

<---

OTHER SOURCE(S): MARPAT 114:73874

ED Entered STN: 23 Feb 1991

AB In a plastic-magnet composition containing Nylon, a magnetic powder, and a lubricating agent, the lubricating agent comprises (RNHCONH)2X (R = C12-18 alkyl; X = divalent organic group). Specifically, the magnetic powder may comprise a Nd-Fe-B alloy.

IT 65792-44-1, Hakurin SX

(lubricating agent, in manufacturing of plastic magnets)

RN 65792-44-1 HCAPLUS

CN Urea, N-octadecyl-N'-[[4-

[[[(octadecylamino)carbonyl]amino]methyl]phenyl]methyl]- (CA INDEX NAME)

IC ICM H01F001-02

CC 77-4 (Magnetic Phenomena)

Section cross-reference(s): 38, 55, 56

IT 43136-14-7, Hakurin SM 65792-44-1, Hakurin SX

103522-96-9, Hakurin LM

(lubricating agent, in manufacturing of plastic magnets)

L53 ANSWER 21 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1989:596557 HCAPLUS Full-text

DOCUMENT NUMBER: 111:196557

ORIGINAL REFERENCE NO.: 111:32673a,32676a

TITLE: Vulcanization of halogenated rubbers by

trithiocyanuric acid and ureas

INVENTOR(S): Chang, Eugene Yue Chieh; Megna, Ignazio Salvatore;

Cody, Robert Dennis

PATENT ASSIGNEE(S): American Cyanamid Co., USA SOURCE: Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | | KIND | DATE | APPLICATION NO. | | DATE |
|------------|---------------------------|--------------|--------------------------|-----------------------------------|---|----------|
| EP | 309730 | A1 | 19890405 | EP 1988-113701 < | _ | 19880823 |
| FI | R: AT, BE, CH, 8804423 | DE, ES, A | , FR, GB, GE 19890329 | R, IT, LI, NL, SE FI 1988-4423 | | 19880927 |
| AU | 8822863 | A | 19890406 | AU 1988-22863 | | 19880927 |
| AU | 613091 | В2 | 19910725 | | | |
| BR | 8804977 | A | 19890502 | BR 1988-4977 < | | 19880927 |
| JP | 01132644 | A | 19890525 | JP 1988-239871 < | | 19880927 |
| ZA | 8807236 | А | 19890530 | ZA 1988-7236 | | 19880927 |
| PRIORIT | Y APPLN. INFO.: | | | US 1987-101630 | A | 19870928 |

OTHER SOURCE(S): MARPAT 111:196557

ED Entered STN: 25 Nov 1989

AB Vulcanizing halogenated rubbers by trithiocyanuric acid (I) and latent accelerators (mono- or polyureas) gives good storage stability and scorch resistance. Compounded Et acrylate-vinyl chloroacetate rubber containing 1 phr I and 3 phr polyurea from m-C6H4[C(Me)2NCO]2 and ethylenediamine was vulcanized at 380° F for 6 min had cure time (t90) 6 min, scorch time 1.1 min, and cure rate index 15.51; vs. 3.4, 1, and 33, resp., with Zn dibutyldithiocarbamate instead of the polyurea.

IT 123548-79-8

(vulcanization accelerators, for halogen-containing rubbers)

RN 123548-79-8 HCAPLUS

CN Urea, N,N''-[1,3-phenylenebis(1-methylethylidene)]bis[N'-butyl- (9CI) (CA INDEX NAME)

IC ICM C08K005-21

ICS C08K005-37; C08L057-08; C08L033-08

CC 39-10 (Synthetic Elastomers and Natural Rubber)

IT 84712-81-2 123504-01-8 123504-10-9 123504-49-4 123548-77-6 123548-78-7 123548-79-8

(vulcanization accelerators, for halogen-containing rubbers)

L53 ANSWER 22 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1989:211700 HCAPLUS Full-text

DOCUMENT NUMBER: 110:211700

ORIGINAL REFERENCE NO.: 110:35127a,35130a

TITLE: Preparation of carbodiimides by a phase-transfer

catalytic method

AUTHOR(S): Jaszay, Zsuzsa M.; Petnehazy, Imre; Toke, Laszlo;

Szajani, Bela

CORPORATE SOURCE: Szerv. Kem. Technol. Tansz., Budapesti Muszaki

Egyet., Budapest, 1521, Hung.

SOURCE: Magyar Kemiai Folyoirat (1988), 94(6-7),

246 - 9

CODEN: MGKFA3; ISSN: 0025-0155

DOCUMENT TYPE: Journal LANGUAGE: Hungarian

ED Entered STN: 10 Jun 1989

A new method is described for the preparation of carbodiimides by dehydration AΒ of ureas with aromatic sulfonic acid chloride under solid-liquid phasetransfer catalytic conditions using solid K2CO3 as base and a lipophile quaternary ammonium salt as catalyst. The method is generally applicable for the synthesis of disubstituted carbodiimides, but especially useful for unsym. substituted carbodiimides. Most of the carbodiimides prepared have been identified in the form of the more stable, crystalline quaternary salt.

ΙΤ 14117-22-7, N-Benzyl-N'-butylurea

> (dehydration of, with arenesulfonyl chloride under phase-transfer catalytic conditions)

14117-22-7 HCAPLUS RN

Urea, N-butyl-N'-(phenylmethyl)- (CA INDEX NAME) CN

CC 21-2 (General Organic Chemistry)

2387-23-7, N,N'-Dicyclohexylurea 5336-24-3, N,N'-Di-tert-butylurea IT25855-24-7,

14117-22-7, N-Benzyl-N'-butylurea

N-Benzyl-N'-cyclohexylurea 32022-55-2 52338-88-2 76866-74-5 111681-31-3 111681-32-4 111681-33-5 111681-34-6 111681-36-8

111681-37-9 120679-86-9

(dehydration of, with arenesulfonyl chloride under phase-transfer catalytic conditions)

L53 ANSWER 23 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1988:5307 HCAPLUS Full-text

DOCUMENT NUMBER: 108:5307

ORIGINAL REFERENCE NO.: 108:1010h,1011a

TITLE: Preparation of carbodiimides using phase-transfer

catalysis

AUTHOR(S): Jaszay, Zsuzsa M.; Petnehazy, Imre; Toke, Laszlo;

Szajani, Bela

Tech. Univ. Budapest, Badapest, H-1521, Hung. CORPORATE SOURCE:

SOURCE: Synthesis (1987), (5), 520-3CODEN: SYNTBF; ISSN: 0039-7881

DOCUMENT TYPE: Journal English LANGUAGE:

CASREACT 108:5307 OTHER SOURCE(S):

Entered STN: 09 Jan 1988 ED

RN:C:NR1 (R = cyclohexyl, Ph, Bu, Me, Me3C; R1 = aminoalkyl, PhCH2, AΒ cyclohexyl, Me3C) were prepared by dehydration of ureas with arenesulfonyl chlorides under solid-liquid phase-transfer conditions with solid K2CO3 as base and PhCH2N+Et3 C1- as catalyst. The method was especially useful for the synthesis of unsym. substituted carbodiimides. The basic carbodiimides were converted into more stable, cryst . quaternary salts.

14117-22-7 ΙT

(dehydration of, by arylsulfonyl chloride)

RN 14117-22-7 HCAPLUS

CN Urea, N-butyl-N'-(phenylmethyl)- (CA INDEX NAME)

n-BuNH_C_NH_CH2_Ph

CC 21-2 (General Organic Chemistry)

IT 2387-23-7 5336-24-3 \$\frac{117-22-7}{25855-24-7} 32022-55-2 52338-88-2 76866-74-5 111681-31-3 111681-32-4 111681-33-5

111681-34-6 111681-35-7 111681-36-8 111681-37-9

(dehydration of, by arylsulfonyl chloride)

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

L53 ANSWER 24 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1987:544976 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 107:144976

ORIGINAL REFERENCE NO.: 107:23191a,23194a

TITLE: Thermal recording material

INVENTOR(S): Inaba, Norihiko; Yuyama, Yukihiro; Yamamoto, Koji;

Kato, Noritomo

PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| | | | | |
| JP 62051480 | A | 19870306 | JP 1985-192186 | 19850830 |
| | | | < | |
| PRIORITY APPLN. INFO.: | | | JP 1985-192186 | 19850830 |
| | | | < | |

ED Entered STN: 17 Oct 1987

AB A heat-sensitive coloring layer for the title material contains a leuco dye, a color developer, and ≥ 1 RNHCONHZNHCONHR1 (I; R, R1 = C10-30 hydrocarbyl). The material shows improved heat sensitivity and produces high-d. images having excellent resistance to plasticizers and fingerprints. Thus, an aqueous dispersion containing 6'-(N-methyl-N-cyclohexylamino)-3'-methyl-2'-phenylaminofluoran, 4,4'-isopropylidenebisphenol, I (R, R1 = C18H37; Z = 1,3-CH2C6H4CH2), CaCO3, hydroxyethyl cellulose, and Me cellulose was coated on a paper sheet to 5.0 g/m2. The obtained recording material produced images with high d., which showed no appreciable bleaching after storage for 24 h at 40° and 90% relative humidity or in contact with fingers.

IT 104241-95-4

(thermal recording material containing, for improved plasticizer and fingerprint resistance)

RN 104241-95-4 HCAPLUS

CN Urea, N,N''-[1,3-phenylenebis(methylene)]bis[N'-octadecyl- (9CI) (CA INDEX NAME)

IC ICM B41M005-18

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 43136-14-7 104241-95-4

(thermal recording material containing, for improved plasticizer and fingerprint resistance)

L53 ANSWER 25 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1987:468282 HCAPLUS Full-text

DOCUMENT NUMBER: 107:68282

ORIGINAL REFERENCE NO.: 107:11133a,11136a

TITLE: Heat-sensitive recording materials INVENTOR(S): Yaguchi, Hiroshi; Sakamoto, Hiroshi

PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| | | | | |
| JP 61287788 | A | 19861218 | JP 1985-131071 | 19850617 |
| | | | < | |
| PRIORITY APPLN. INFO.: | | | JP 1985-131071 | 19850617 |
| | | | / | |

- ED Entered STN: 21 Aug 1987
- The title materials contain overcoat layers containing RNHCONHR1 and/or R2NHCONHZNHCONHR3 (R-R3 = C10-30 alkyl; Z = hydrocarbylene). The materials show good head-matching property and little deterioration in thermal sensitivity. Thus, a recording material was prepared by using 3'-(N-methyl-N-cyclohexyl)amino-6'-methyl-7'-anilinofluoran, 1,7-di(4-hydroxyphenylthio)-3,5-dioxaheptane, and N,N'-distearylurea. The material was used for printing at 0.45 W/dot and 1.2 ms to show high color d., little sticking, and little scumming.
- IT 104241-95-4

(thermal printing material with overcoat layer from)

- RN 104241-95-4 HCAPLUS
- CN Urea, N,N''-[1,3-phenylenebis(methylene)]bis[N'-octadecyl- (9CI) (CA INDEX NAME)

IC ICM B41M005-18

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other

Reprographic Processes)

IT 4051-66-5, N,N'-Distearylurea 104241-95-4 109661-36-1 (thermal printing material with overcoat layer from)

L53 ANSWER 26 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1983:55058 HCAPLUS Full-text

DOCUMENT NUMBER: 98:55058

ORIGINAL REFERENCE NO.: 98:8491a,8494a

TITLE: Poly(tetramethylene terephthalate) compositions
PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|-------|----------|-----------------|----------|
| JР 57100157 | А | 19820622 | JP 1980-177710 | 19801216 |
| | | | < | |
| PRIORITY APPLN. INFO.: | | | JP 1980-177710 | 19801216 |
| | | | | |

ED Entered STN: 12 May 1984

Fire-resistant poly(tetramethylene terephthalate) (I) compns. with good mech. properties. contain 1-10 phr NH4 polyphosphate and 0.01-1 phr RNHCONHZNHCONHR1 (Z = an aromatic hydrocarbn residue; R, R1 = a C8-32 aliphatic hydrocarbon group). Thus, an injection-molded specimen prepared from a composition containing I 100, NH4 polyphosphate 3.5, and 1,4-bis(3-octadecylaminomethyl)benzene (II) [65792-44-1] 0.3 part had fire resistance rating (UL 94) V-2, tensile strength 560 kg/cm2, elongation 30%, Izod impact strength 3.4 kg-cm/cm, and NH4 polyphosphate lumping (counted for 0.5-1 mm-diameter particles) none, compared with V-2, 560 kg/cm2, 10%, 2.8 kg-cm/cm, and 1.3/10 cm2, resp., for a control prepared from a composition not containing II.

IT 65792-44-1

(dispersants, for ammonium polyphosphate fireproofing agents, in polyesters)

RN 65792-44-1 HCAPLUS

CN Urea, N-octadecyl-N'-[[4-

[[[(octadecylamino)carbonyl]amino]methyl]phenyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_2\text{--}\text{NH} - \overset{\circ}{\text{C}}\text{--}\text{NH} - (\text{CH}_2)_{17}\text{--}\text{Me} \\ \text{Me} - (\text{CH}_2)_{17}\text{--}\text{NH} - \overset{\circ}{\text{C}}\text{--}\text{NH} - \text{CH}_2 \end{array}$$

- IC C08L067-02; C08K005-20; C08K005-51
- CC 37-6 (Plastics Manufacture and Processing)
- IT 65792-44-1

(dispersants, for ammonium polyphosphate fireproofing agents, in polyesters)

L53 ANSWER 27 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1981:463307 HCAPLUS Full-text

DOCUMENT NUMBER: 95:63307

ORIGINAL REFERENCE NO.: 95:10701a,10704a

TITLE: Polyamide resin composition

INVENTOR(S): Ohmura, Zasuhiro; Maruyama, Seiichiro; Kawasaki,

Hiroyuku

PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 20 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA | ATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------|---------------------------|--------------|----------|------------------|----------|
| EF | 29566 | A1 | 19810603 | EP 1980-107120 | 19801117 |
| EF | P 29566 R: CH, DE, FR, | B1 GB, IT | 19840418 | ` | |
| JF | 2 56074145 | A | 19810619 | JP 1979-151077 | 19791121 |
| JE | 63002983 | В | 19880121 | | |
| US | 3 4339555 | A | 19820713 | US 1980-200579 | 19801024 |
| PRIORIT | TY APPLN. INFO.: | | | JP 1979-151077 A | 19791121 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

ED Entered STN: 12 May 1984

AB A composition having good impact resistance and molα release properties comprises a polyamide containing urea derivative RNHCONHR1NHCONHR2 (R1 = a divalent aromatic hydrocarbon group; R1, R2 = C8-32 alkyl) and a graft copolymer of an ethylene-α-olefin copolymer and an unsatd. carboxylic acid. Thus, 80 parts nylon 6 [25038-54-4] and 20 parts 1-butene-ethylene-maleic anhydride graft copolymer [63625-36-5] were melt blended at 250° at 30 mm in an extruder and pelletized. To 100 parts of the pellets was added 0.15 part 1,4-bis(3-octadecylureidomethyl)benzene (I) [63792-44-1]. When the composition was injection molded, 30 shots were made before release failure compared with 4 shots for the composition containing no I; impact resistance was 57 kg-cm/cm compared with 40 kg-cm/cm for the composition containing no I.

(polyamide-ethylene copolymer compns. containing, impact-resistant and mold releasing)

RN 65792-44-1 HCAPLUS

TC.

CN Urea, N-octadecyl-N'-[[4-

[[[(octadecylamino)carbonyl]amino]methyl]phenyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_2\text{--}\text{NH} - \overset{\circ}{\text{C}} \text{--}\text{NH} - (\text{CH}_2)_{17}\text{--}\text{Me} \\ \text{Me} - (\text{CH}_2)_{17}\text{--}\text{NH} - \overset{\circ}{\text{C}} \text{--}\text{NH} - \text{CH}_2 \end{array}$$

C08L077-00; C08L051-06; C08K005-21

CC 36-6 (Plastics Manufacture and Processing)

ST polyamide mold release impact; nylon polyolefin mold release; ureidobenzene nylon mold release; urea deriv mold release agent

IT Kaolin, uses and miscellaneous

(nucleating agent, for impact-resistant polyamide-ethylene copolymer moldings)

IT 32131-17-2, uses and miscellaneous

(ethylene copolymer blend, containing urea derivative, impact-resistant and mold-releasable)

IT 65792-44-1

(polyamide-ethylene copolymer compns. containing, impact-resistant and mold releasing)

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L53 ANSWER 28 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1981:140664 HCAPLUS Full-text

DOCUMENT NUMBER: 94:140664

ORIGINAL REFERENCE NO.: 94:23047a,23050a

TITLE: Aromatic polyester-polycarbonate resin

compositions

PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|------------------------|------|----------|-----------------|---|----------|
| | | | | | |
| JP 55131047 | A | 19801011 | JP 1979-39544 | | 19790402 |
| | | | < | | |
| PRIORITY APPLN, INFO.: | | | JP 1979-39544 | Α | 19790402 |
| | | | < | | |

ED Entered STN: 12 May 1984

AΒ An aromatic polyester-polycarbonate (I) which has intrinsic viscosity (CH2C12, 20°) 0.3-1.5, Tg 160-90°, and CO2H end groups ≤10 μ equiv/g resin comprises p-HOC6H4ZC6H4OH-p (Z = divalent group, rings may be substituted) residues, terephthalic acid residues, and carbonate linkages at molar ratios of 1:0.33-0.75:0.67-0.25 and contains 0.01-5 parts (per 100 parts I) urea compound RNHCONHZ1NHCONHR1 (Z1 = aromatic hydrocarbon residue; R, R1 = C8-32 aliphatic hydrocarbon residue). Thus, a 3% CH2Cl2 solution of terephthaloyl chloride, a 13% aqueous solution of bisphenol A Na salt (II), and 2% aqueous Et3N were passed through a tubular glass reactor with COC12 introduced at the midpoint to give a chloroformate-terminated oligomer. A CH2C12 solution of the oligomer, II, 25% NaOH solution, 2% Et3N solution, and p-tert-butylphenol were stirred at room temperature for 2h. The product (III) [74575-75-0] had intrinsic viscosity 0.49 and bisphenol A residue-terephthalic acid residuecarbonate linkage molar ratio 1:0.48:0.52. To 100 parts III 0.1 part 1,4bis[(3-octadecylureido)methyl]benzene (IV) [65792-44-1] was added, and the mixture was pelletized and injection molded at 340° (mold temperature 137°). The product showed mold releasability (number of shots until ejector marks are apparent) 30 shots, injection pressure 920 kg/cm2, tensile and flexural strength (ASTM D 638-68 and 790, resp.) 710 and 870 kg/cm2, Izod impact strength (ASTM D 256) 42 kg-cm/cm, and deformation temperature 160°. III without IV showed lower mold releasability (7 shots) and required higher pressure for molding (1050 kg/cm2).

IT 65792-44-1

(mold release agent and lubricant, for aromatic polyester polycarbonate)

RN 65792-44-1 HCAPLUS

CN Urea, N-octadecyl-N'-[[4-

[[[(octadecylamino)carbonyl]amino]methyl]phenyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c} & & \\ & \\ \text{Me-} \text{ (CH2) } \text{17-NH-CH2} \end{array} \\ \text{NH-CH2} \text{ NH-CH2} \\ \end{array}$$

IC C08L069-00; C08K005-21; C08L067-02

CC 36-6 (Plastics Manufacture and Processing)

ST arom polyester polycarbonate molding compn; xylylenebisurea mold release agent lubricant; urea xylylenebis lubricant plastic molding

IT Molding of plastics and rubbers

(of aromatic polyester-polycarbonates, xylylenebis(octadecylurea) for improved processability in)

IT Lubricants

(xylylenebis(octadecylurea), for aromatic polyester-polycarbonate
molding compns.)

IT Polyesters, uses and miscellaneous

(polycarbonate-, molding of, xylylenebis(octadecylurea)

for improved processability in)

IT Polycarbonates

(polyester-, molding of, xylylenebis(octadecylurea) for improved processability in)

IT 65792-44-1

 $(\mbox{mold}$ release agent and lubricant, for aromatic polyester polycarbonate)

IT 74575-75-0

(molding of, xylylenebis(octadecylurea) for improved processability in)

L53 ANSWER 29 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1979:104986 HCAPLUS Full-text

DOCUMENT NUMBER: 90:104986

ORIGINAL REFERENCE NO.: 90:16599a,16602a

TITLE: Polyamide resin compositions

INVENTOR(S): Omura, Yasuhiro; Miyoshi, Katsunori; Koqa,

Tokumichi; Murakami, Yukinobu

PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| | | | | |
| JP 53125459 | A | 19781101 | JP 1977-40167 | 19770408 |

JP 55021062 В 19800606 US 429**8**51**8** Α 19811103 US 1977-827256 19770824 <--PRIORITY APPLN. INFO.: JP 1976-106530 A 19760906 <--JP 1977-18974 A 19770223 <--JP 1977-40167 A 19770408 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

ED Entered STN: 12 May 1984

AB 1,4-Bis(3-octadecylureidomethyl)benzene (I) [\$5792-44-1] was used as a release agent for nylon 6 [25038-54-4] containing cyanuric acid melamine salt (II) [16133-31-6], cyanuric acid [108-80-5], or melamine [108-78-1] as a fireproofing agent.

IT 65792-44-1

(release agents, for polyamides containing fireproofing agents)

RN 65792-44-1 HCAPLUS

CN Urea, N-octadecyl-N'-[[4-

[[[(octadecylamino)carbonyl]amino]methyl]phenyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c} \begin{array}{c} \\ \\ \\ \\ \end{array} \\ \text{Me-} (\text{CH}_2)_{17} - \text{NH-} \\ \\ \begin{array}{c} \\ \\ \\ \end{array} \\ \text{NH-} \text{CH}_2 \end{array} \\ \text{NH-} \text{CH}_2)_{17} - \text{Me} \end{array}$$

IC C08L077-00

CC 36-6 (Plastics Manufacture and Processing)

IT 65792-44-1

(release agents, for polyamides containing fireproofing agents)

L53 ANSWER 30 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1979:72921 HCAPLUS Full-text

DOCUMENT NUMBER: 90:72921

ORIGINAL REFERENCE NO.: 90:11553a,11556a

TITLE: Polyamide chips for injection molding
INVENTOR(S): Omura, Yasuhiro; Miyoshi, Katsunori; Koga,

Tokumichi

PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|------------------------|------|----------|-----------------|---|----------|
| TD F31360F6 | 7 | 10701100 | TD 1077 41006 | | 10770411 |
| JP 53126056 | A | 19781102 | JP 1977-41086 | | 19770411 |
| | _ | 4000000 | < | | |
| JP 550210 6 3 | В | 19800606 | | | |
| PRIORITY APPLN. INFO.: | | | JP 1977-41086 | A | 19770411 |
| | | | < | | |

ED Entered STN: 12 May 1984

Polyamide chips are treated with 0.005-1 weight% tackifiers such as polyalkylene glycol esters and 0.005-5 weight % bisureido compds. to improve the injection moldability of the chips. Thus, 100 parts nylon 6 [25038-54-4] chips and 0.03 part Nonion L 4 [9004-81-3] were stirred, treated with 0.1 part 1,4-bis(3-octadecylureidomethyl)benzene (I) [65792-44-1], and stirred further. When the above chips were injection moldad at 250°, the average plasticization time was 11.0 s, and the number of shots before release problems started (injection time 6 s, cooling time at mold temperature 80° 3 s) 80-90, compared with 10.6 and 15-20 for similar chips treated with Ca stearate in place of I.

IT 65792-44-1

(release agents, containing polyethylene glycol esters, in injection molding of nylon 6)

RN 65792-44-1 HCAPLUS

CN Urea, N-octadecyl-N'-[[4-

[[[(octadecylamino)carbonyl]amino]methyl]phenyl]methyl]- (CA INDEX NAME)

IC C08L077-00

CC 36-6 (Plastics Manufacture and Processing)

ST polyamide injection molding; nylon injection molding; release agent bisurea nylon molding; polyethylene glycol ester tackifier

IT Paraffin oils

Siloxanes and Silicones, uses and miscellaneous (release agents, containing bis(octadecylureidomethyl)benzene, in injection molding of nylon 6)

IT Molding of plastics and rubbers

(injection, of nylon 6, release agents for)

IT 25038-54-4, uses and miscellaneous

(injection molding of, release agents for)

IT 9004-81-3 9005-08-7 9005-64-5

(release agents, containing bis(octadecylureidomethyl)benzene, in injection molding of nylon 6)

IT 65792-44-1

(release agents, containing polyethylene glycol esters, in injection molding of nylon 6)

L53 ANSWER 31 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1978:171165 HCAPLUS Full-text

DOCUMENT NUMBER: 88:171165

ORIGINAL REFERENCE NO.: 88:26990h, 26991a

TITLE: Polyamide resin composition

INVENTOR(S): Ohmura, Yasuhiro; Murakami, Yukinobu; Hidaka,

Ryoji

PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan

SOURCE: Ger. Offen., 23 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|--------------------------|------|----------|-----------------|---|----------|
| DE 2740092 | A1 | 19780316 | DE 1977-2740092 | | 19770906 |
| DE 2740092 | В2 | 19800508 | < | | |
| DE 2740092 DE 2740092 | C3 | 19871022 | | | |
| JP 53031759 | A | 19780325 | JP 1976-106530 | | 19760906 |
| JP 58025379 | В | 19830527 | < | | |
| PRIORITY APPLN. INFO.: | Ь | 19030327 | JP 1976-106530 | А | 19760906 |

ED Entered STN: 12 May 1984

AB Melamine cyanurate (I) (i.e., reaction product of cyanuric acid and melamine) was mixed with nylon 6 [25038-54-4] to give a fireproofing agent which did not migrate from the polymer during molding or aging. In some cases, the nylon 6-I mixts. were mixed with CuCl, KI, and SnCl2 for improved heat resistance, with an alkylenebisstearamide for improved dispersion of the I, or with a bisureido compound as a lubricant for improved molding. Thus, a mixture 94% nylon 6 and 6% I had good fire resistance (V-O in UL 94 test).

IT 65792-44-1

(lubricants, polyamides containing melamine cyanurate fireproofing agent and, for improved molding)

RN 65792-44-1 HCAPLUS

CN Urea, N-octadecyl-N'-[[4-

[[[(octadecylamino)carbonyl]amino]methyl]phenyl]methyl]- (CA INDEX NAME)

IC C08L077-00

CC 36-6 (Plastics Manufacture and Processing)

IT 65792-44-1

(lubricants, polyamides containing melamine cyanurate fireproofing agent and, for improved molding)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L53 ANSWER 32 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1978:106248 HCAPLUS Full-text

DOCUMENT NUMBER: 88:106248

ORIGINAL REFERENCE NO.: 88:16677a,16680a

TITLE: Thermoplastic resin compositions

INVENTOR(S): Omura, Yasuhiro; Miyoshi, Masanori; Irie,

Hiroyuki; Koga, Norimichi

PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|------------------------|-------|--------------|-----------------|---|----------|
| JР 52119654 | A | 19771007 | JP 1976-36612 | | 19760401 |
| | | | < | | |
| JP 53039458 | В | 19781021 | | | |
| PRIORITY APPLN. INFO.: | | | JP 1976-36612 | A | 19760401 |
| | | | < | | |

ED Entered STN: 12 May 1984

AB Molded plastics, with improved mold releasability, were prepared by blending a urea compound with a thermoplastic resin and molding the blend. Thus, a blend of poly(butylene terephthalate) (I) [24968-12-5] containing 0.05% (based on I) 1,4-bis[(3-octadecylureido)methyl]benzene [65792-44-1] was injection molded to give a product with good mold releasability, whereas mold releasability was poor for a product molded from I only.

IT 65792-45-2

(release agents, for molding of polyamides)

RN 65792-45-2 HCAPLUS

CN Urea, N,N''-[1,4-phenylenebis(methylene)]bis[N'-dodecyl- (9CI) (CA INDEX NAME)

IT 65792-44-1

(release agents, for molding of polycarbonates or polyamides)

RN 65792-44-1 HCAPLUS

CN Urea, N-octadecyl-N'-[[4 [[[(octadecylamino)carbonyl]amino]methyl]phenyl]methyl]- (CA INDEX NAME)

- IC C08K005-21
- CC 36-6 (Plastics Manufacture and Processing)
- ST urea compd release agent; molded plastic releasability; polyester molded releasability; bisoctadecylureidomethylbenzene release agent
- IT Polycarbonates

Polyesters, uses and miscellaneous (molding of, release agents for, urea derivs. as)

```
ΙT
    Molding of plastics and rubbers
        (of polycarbonates, polysesters or polyamides, release agents for,
        urea compds. as)
ΙT
     24936-68-3 24968-12-5
                             25038-54-4, uses and miscellaneous
     25971-63-5
                 26062-94-2
        (molding of, release agents for, urea derivs. as)
ΙT
     65792-45-2
        (release agents, for molding of polyamides)
ΙT
     65792-47-4
        (release agents, for molding of polycarbonates)
ΤT
     65792-44-1
        (release agents, for molding of polycarbonates or
        polvamides)
     65792-43-0
ΤТ
        (release agents, for molding of polyesters)
ΙT
     65792-46-3
        (release agents, for molding of polyesters or polyamides)
     65792-42-9
ΙT
        (release agents, for molding of polyesters or
        polycarbonates)
L53 ANSWER 33 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER:
                        1972:553270 HCAPLUS Full-text
DOCUMENT NUMBER:
                         77:153270
ORIGINAL REFERENCE NO.: 77:25203a,25206a
TITLE:
                         Stabilized polyolefin compositions
                         Ito, Seicho; Miyazawa, Yasuo; Tsurutani, Tetsuo
INVENTOR(S):
PATENT ASSIGNEE(S):
                        Showa Denko K. K.
SOURCE:
                         Jpn. Tokkyo Koho, 4 pp.
                         CODEN: JAXXAD
DOCUMENT TYPE:
                        Pat.ent.
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                DATE
     PATENT NO.
                        KIND
                               DATE APPLICATION NO.
     JP 47017901
                        B4
                                19720524 JP 1969-25578
                                                                   19690404
                                                   <--
     Entered STN: 12 May 1984
ΕD
     A polypropylene (I) [9003-07-0] composition having improved heat resistance
AΒ
     contained a urea derivative, e.g., 1,1'-m-xylylenebis(3-butylurea) (II) [
     36966-14-0], and dilauryl thiodipropionate (III) [123-28-4] or distearyl
     thiodipropionate [693-36-7]. For example, a 0.5 mm thick I sheet containing
     0.1% II and 0.1% III had heat resistance (time to crack, 120.deg., air oven)
     600 hr, compared with 20 hr for I alone, 23 hr for I containing 0.1% II, and
     60 hr for I containing 0.1% III. The urea derivs. also used were 1,1'-p-
     xylylenebis(3-cyclohexylurea) [36966-15-1], a 1,1'-m-xylylenebis(3-benzylurea)
     [36966-16-2]-1,1'-p-xylylenebis(3-benzylurea) [36966-17-3] mixture, 1,1'-m-
     xylylenebis(3,3-dimethylurea) [16578-48-6]-1,1'-p-xylylenebis(3,3-dimethylurea)
     dimethylurea) [36966-19-5] mixture, 1,1'-m-xylylenebis(3,3-dibenzylurea)
     [36966-20-8], and 1,1'-(2,5-dimethyl-p-xylylene)bis(3-butylurea) [36966-21-9].
     36966-14-0
                36966-21-9
ΙΤ
        (heat stabilizers, containing thiodipropionates, for polypropylene)
RN
     36966-14-0 HCAPLUS
     Urea, N,N''-[1,3-phenylenebis(methylene)]bis[N'-butyl- (9CI) (CA
CN
     INDEX NAME)
```

RN 36966-21-9 HCAPLUS

CN Urea, N,N''-[(2,5-dimethyl-1,4-phenylene)bis(methylene)]bis[N'-butyl-(9CI) (CA INDEX NAME)

$$\begin{array}{c}
\text{Me} & \text{CH}_2 - \text{NH} - \overset{\circ}{\text{C}} - \text{NHBu-n} \\
\text{N-BuNH} - \overset{\circ}{\text{U}} - \text{NH} - \text{CH}_2
\end{array}$$

IC C08FDK

CC 36-6 (Plastics Manufacture and Processing)

 IT
 16578-48-6
 36966-14-0
 36966-15-1
 36966-16-2

 36966-17-3
 36966-19-5
 36966-20-8
 36966-21-3

(heat stabilizers, containing thiodipropionates, for polypropylene)

L53 ANSWER 34 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER:

ACCESSION NUMBER: 1952:57171 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 46:57171

ORIGINAL REFERENCE NO.: 46:9517e-i,9518a-h

TITLE: Synthesis of 1-mono- and 1,3-disubstituted

6-aminouracils. Diuretic activity

AUTHOR(S): Papesch, Viktor; Schroeder, Elmer F.

CORPORATE SOURCE: G. D. Searle & Co., Chicago

SOURCE: Journal of Organic Chemistry (1951), 16,

1879-90

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal LANGUAGE: Unavailable OTHER SOURCE(S): CASREACT 46:57171

ED Entered STN: 22 Apr 2001

GI For diagram(s), see printed CA Issue.

Some mono- and disubstituted uracils, RN.CO.NR'.CO.CH:CNH2 (I), are prepared AΒ and evaluated as diuretics. I are prepared by 4 methods: (A) 360 g. CO(NHPr)2, 233 g. NCCH2CO2H (II), and 720 cc. Ac2O are heated 2 hrs. at 75- 80° , the Ac2O is distilled oft in vacuo at 80° , and 200 cc. H2O added and again distilled off, giving NHPrCONPrCOCH2CN, which is added in 1.2 l. H2O (cooled to 10°) with stirring to 175 cc. 70% NaOH, causing the temperature to rise to $60-70^{\circ}$; crystallization of the oil formed gives 65% I (R = R' = Pr), m. $136-8^{\circ}$. For the preparation of mono-substituted I, 116 g. BuNHCONH2, 94 g. II, and 200 cc. Ac20 are heated 2 hrs. at 75-80°, and the mixture is stirred with 500 cc. ether and cooled 2 hrs. in an ice bath, giving 122 g. BuNHCONHCOCH2CN, which is treated in 300 cc. H2O and 150 cc. EtOH at 85° with 75 cc. 10% aqueous NaOH, and the mixture kept 0.5 hr. at 85° with the addition of NaOH to keep it alkaline and then faintly acidified, giving 38% I (R = Bu, R' = H), m. 266-7°; (B) adding 312 g. HOCH2CH2NHCONH2 and 339 g. NCCH2CO2Et (III) to 3.3 l. EtOH containing 115 g. Na and refluxing the mixture 18 hrs. with stirring give the Na salt, which, on acidification, yields 184 g. I (R =

HOCH2CH2, R' = H), m. $261-2^{\circ}$; (C) 135 g. I (R = Me, R' = H) (IV) and 280 cc.15% NaOH are refluxed 2 hrs. in 480 cc. 95% EtOH with 204 q. PrI, the EtOH and excess PrI distilled off on a steam bath, and the residue is diluted with 1.2 1. hot H2O, giving 40 g. unchanged IV and 40 g. I (R = Me, R' = Pr), m. 165- $7^{\circ};$ gradually treating 60 g. I (R = Bu, R' = H) in 135 cc. 10% NaOH and 30 cc. EtOH at 50° with 50 cc. Me2SO4 gives 50 g. I (R = Bu, R' = Me), m. $136-8^{\circ}$; (D) keeping 1 mol. NH2Bu with 1 mol. III 24 hrs. at 20° gives BuNHCOCH2CN (V), m. 71-2°, which (14 g.) is refluxed 24 hrs. with 12 g. EtNCO in 100 cc. PhMe, the solution cooled, 10 g. unchanged V filtered off, and the filtrate concentrated in vacuo, giving 1 g. I (R = Et, R' = Bu), m. 135-6°. RNHCONH2 are prepared in 95% yield by addition of 1 mol. KCNO to 1 mol. RNH2.H2SO4; CO(NHR)2 are prepared in almost 100% yield by adding 2.2 mols. COC12 in 500 cc. C6H6 to 2 mols. RNH2 and 2 mols. NaOH in 300 cc. H2O and stirring the mixture 0.5 hr.; RNHCONHR' are obtained in almost 100% yield by adding 1 mol. of the appropriate RNCO in 3 vols. C6H6 to 1 mol. NH2R' in C6H6. CH2:CMeCH2NHCONH2 m. 117-19°; MeNHCONHPr m. 65-6°; MeNHCONHCHMe2 m. 94-6°. The following EtNHCONHR are prepared: R = Pr, m. $79-80^{\circ}$; Me2CH, m. $158-9^{\circ}$; C6H13, m. $57-8^{\circ}$; HOCH2CH2, m. 56-7°; HOCH2CH2CH2, m. 35-7°; MeCH(OH)CH2 is used as a sirup; cyclohexyl, m. 113-15°; PhCH2CH2CH2, m. 47-9°. The following intermediate RNHCONR'COCH2CN are isolated (R', R, m.p. in the order given): H, Pr, 169-70°; H, Me2CH, 145-6°; H, Bu, 152-4°; H, CH2: CHCH2, 142-3°; H, CH2: CMeCH2, 143-5°; H, MeOCH2CH2CH2, 130-3°; CH2:CHCH2, Et, 84-6°; Et, Me2CH, 73-5°; Et, cyclohexyl, 110-12°. The I listed in the table are prepared When a mixture of isomers is obtained, R', R, Method, M. p., °C; H, H, A, B, 310-12; H, Me, A, B, 306-7; H, Et, A, B, 288-90; H, HOCH2CH2, B, 261-2; H, Pr, A, 273-5; H, CH2:CHCH2, A, 273-4; H, Bu, A, 266-7; H, Me2CHCH2, A, 271-3; H, PhCH2, A, 285-6; H, MeOCH2CH2CH2, A, 205-7; H, Me2NCH2CH2, A, 260-1; H, CH2:CMeCH2, A, 266-8; Me, Me, A, 305-7; Me, Et, A, C, 232-3; Me, Pr, A, C, 165-7; Me, Me2CH, A, 210-12; Me, Bu, C, 136-8; Me, MeCHCH2, C, 173-5; Me CH2: CHCH2, C, 143-4; Me, CH2:CMeCH2, C, 145-6; Me, HOCH2CH2 B, C, 216-17; Et, Me, C, 208-9; Et, Et, A, 198-9; Et, Pr (VI), A, C, 169-70; Et, Me2CH, A, 200-1; Et, CH2:CHCH2 (VII), A, C, 143-4; Et, CH: CMeCH2, A, 157-9; Et, Bu, A, C, 146-7; Et, C6H13, A, 161-3; Et, HOCH2CH2, A, B, 180-1; Et, MeCH(OH)CH2, A, 167-70; Et, HOCH2CH2CH2, A, 170-4; Et, Cyclohexyl, A, 176-8; Et, PhCH2CH2CH2, A, 141-3; Pr, Me, C, 160-1; Pr, Et (VIII), A, C, 146-7; Pr, Pr, A, 136-8; Pr, CH2:CHCH2, C, 117-18; CH2:CHCH2, Et (IX), D, 143-4; CH2:CHCH2, Me2CHCH2, A, 92-7; CH2:CHCH2, Ph, A, 190-4; CH2:CHCH2, PhCH2, A, 218-20; Bu, Et, D, 135-6; Bu, CH2:CHCH2, C, 95-7; Bu, Bu, A, 105-8; MeOCH2CH2CH2, Ph, A, 75-6; PhCH2, PhCH2, A, 122-5; as in the condensation of EtNHCONHPr with II and ring closure, they are separated by fractional crystallization The mixed m.p. curves of VI and VIII, and of VII and IX are given. The diuretic activity of some I and their toxicity are given in a table.

IT 70622-88-7P, Urea, 1-ethyl-3-(3-phenylpropyl)(preparation of)

RN 70622-88-7 HCAPLUS

CN Urea, N-ethyl-N'-(3-phenylpropyl)- (CA INDEX NAME)

CC 10 (Organic Chemistry)
IT 550-28-7P, Uracil, 6-amino-3-methyl-1-(2-methylallyl) - 642-44-4P,
Uracil, 1-allyl-6-amino-3-ethyl- 2434-53-9P, Uracil,
6-amino-1-methyl- 4852-21-5P, Uracil, 1-allyl-6-amino- 6642-31-5P
Uracil, 6-amino-1,3-dimethyl- 7052-53-1P, Uracil,
1-allyl-6-amino-3-methyl- 29346-51-8P, Urea,

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1-\text{ethyl}-3-(2-\text{hydroxyethyl})- 36102-06-4P, Urea, 1-\text{cyclohexyl}-3-\text{ethyl}-
     36981-01-8P, Urea, 1-butyl-3-cyanoacetyl- 38014-52-7P, Urea,
     1-methyl-3-propyl- 38014-53-8P, Urea, 1-isopropyl-3-methyl-
     38014-56-1P, Urea, 1-ethyl-3-propyl- 38014-57-2P, Urea,
     1-ethyl-3-isopropyl- 41078-07-3P, Urea, 1-cyanoacetyl-3-propyl-
     41740-15-2P, Uracil, 6-amino-1,3-diethyl- 41862-09-3P, Uracil,
     6-amino-1-ethyl- 41862-11-7P, Uracil, 6-amino-1-benzyl-
     41862-13-9P, Uracil, 6-amino-1-ethyl-3-methyl- 41862-14-0P, Uracil,
     6-amino-1,3-dipropyl- 41862-16-2P, Uracil, 6-amino-1,3-dibutyl-
     41862-17-3P, Uracil, 6-amino-1,3-dibenzyl- 53681-47-3P, Uracil,
     6-amino-1-propyl- 53681-48-4P, Uracil, 6-amino-3-methyl-1-propyl-
     53681-48-4P, Uracil, 6-amino-3-methyl-1-propyl- 53681-49-5P, Uracil,
     6-amino-1-butyl- 53681-50-8P, Uracil, 6-amino-1-butyl-3-methyl-
     56075-69-5P, Uracil, 6-amino-1(2-hydroxyethyl)- 56075-75-3P, Uracil,
     6-amino-1-isobutyl- 58481-39-3P, Uracil,
     6-amino-1-isobutyl-3-methyl- 60860-26-6P, Urea,
     1-cyanoacetyl-3-(3-methoxypropyl)- 63981-29-3P, Uracil,
    3-allyl-6-amino-1-ethyl- 63981-31-7P, Uracil,
6-amino-1-ethyl-3-propyl- 63981-32-8P, Uracil,
6-amino-3-ethyl-1-propyl- 63981-33-9P, Uracil,
     6-amino-1-methyl-3-propyl- 63981-33-9P, Uracil,
     6-amino-1-methyl-3-propyl- 70622-88-79, Urea,
     1-\text{ethyl}-3-(3-\text{phenylpropyl})- 89487-41-2P, Urea, (2-methylallyl)-
     113885-19-1P, Urea, 1-cyanoacetyl-3-isopropyl- 128751-17-7P, Uracil,
     6-amino-1-isopropyl-3-methyl- 134736-03-1P, Urea, 1-ethyl-3-hexyl-
     158893-39-1P, Uracil, 6-amino-1-(3-methoxypropyl)- 195045-55-7P,
     Uracil, 6-amino-3-ethyl-1-(2-hydroxyethyl)- 195045-62-6P, Uracil,
     6-amino-3-ethyl-1-methyl- 197704-85-1P, Urea,
     1-cyanoacetyl-3-cyclohexyl-1-ethyl- 199106-80-4P, Urea,
     1-ethyl-3-[3-hydroxypropyl]- 252941-89-2P, Uracil,
     1-ally1-6-amino-3-buty1- 366445-27-4P, Uracil,
     6-amino-1-(2-methylallyl)- 409315-28-2P, Urea,
     1-allyl-1-cyanoacetyl-3-ethyl- 500691-98-5P, Urea,
     1-cyanoacetyl-1-ethyl-3-isopropyl- 500692-17-1P, Uracil,
     6-amino-3-ethyl-1-hexyl- 638137-17-4P, Uracil,
     6-amino-1-(2-dimethylaminoethyl)- 857474-47-6P, Uracil,
     6-amino-3-ethyl-1-[2-hydroxypropyl]- 857475-11-7P, Uracil,
     6-amino-3-(3-methoxypropyl)-1-phenyl- 857475-17-3P, Uracil,
     6-amino-3-ethyl-1(2-methylallyl)- 857475-20-8P, Uracil,
     6-amino-3-ethyl-1-[3-hydroxypropyl]- 859736-06-4P, Urea,
     1-ethyl-3-[2-hydroxypropyl]- 859786-92-8P, Uracil,
     6-amino-1(2-hydroxyethyl)-3-methyl- 859913-76-1P, Uracil,
     6-amino-1-butyl-3-ethyl- 859913-76-1P, Uracil,
     6-amino-1-butyl-3-ethyl- 872828-38-1P, Urea, 1-allyl-3-cyanoacetyl-
     873403-47-5P, Uracil, 6-amino-1-cyclohexyl-3-ethyl- 873403-48-6P,
     Uracil, 3-allyl-6-amino-1-phenyl- 873403-49-7P, Uracil,
     3-allyl-6-amino-1-isobutyl- 873403-50-0P, Uracil,
     3-ally1-6-amino-1-benzy1- 873408-58-3P, Uracil,
     6-amino-3-ethyl-1-isopropyl- 874516-81-1P, Uracil,
     6-amino-3-butyl-1-ethyl- 874516-81-1P, Uracil,
     6-amino-3-butyl-1-ethyl- 874517-48-3P, Urea,
     1-cyanoacetyl-3-(2-methylallyl)- 875239-37-5P, Uracil,
     6-amino-3-ethyl-1-(3-phenylpropyl)- 875239-38-6P, Uracil,
     1-ally1-6-amino-3-propy1-
        (preparation of)
                               THERE ARE 54 CAPLUS RECORDS THAT CITE THIS
OS.CITING REF COUNT:
                        54
                               RECORD (54 CITINGS)
```

L53 ANSWER 35 OF 35 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1952:42191 HCAPLUS $\underline{\text{Full-text}}$

DOCUMENT NUMBER: 46:42191
ORIGINAL REFERENCE NO.: 46:7051e-h

TITLE: Urea-formaldehyde condensation. II. The origin of

the carbamidomethyl ether bridges

AUTHOR(S): Zigeuner, G.; Knierzinger, W.; Voglar, K.;

Wiesenberger, E.; Sobotka, M.

CORPORATE SOURCE: Univ. Graz, Austria

SOURCE: Monatshefte fuer Chemie (1951), 82,

847-55

CODEN: MOCMB7; ISSN: 0026-9247

DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 46:42191

ED Entered STN: 22 Apr 2001

cf. C.A. 45, 5966h. Me2CHCH2CONHCH2OH (I) with alkali and BzCl gives AΒ bis(isovalerylaminomethyl) ether (II), m. 107°. II with 2,4-Me2C6H3OH (III) in alc. and H2SO4 gives 3,5,2-Me2(HO)C6H2CH2NHCOR (IV) (R = iso-Bu), m. 95- 6.5° , identical with a sample made from I and III. (RNHCONHCH2)20 (V) (R = Et) with III in HCO2H gives 3,5,2-Me2(HO)C6H2CH2NHCONHR (VI), m. 119.5°. Phenylurea, NaOH, and paraformaldehyde in MeOH give RNHCONHCH2OH (VII) (R = Ph), m. 127°, which with III yield VI (R = Ph), m. 169°. Phenylurea, Na2CO3, and CH2O give V (R = Ph), m. $182-3^{\circ}$, which with III gives VI (R = Ph), m. 169°, identical with that prepared from VII. [(HOCH2)2N]2CO with III gives [3,5,2-Me2(HO)C6H2CH2NH]2CO (VIII), m. 169° (or 120° with loss of solvent C6H6 and remelting at 169°). Urea with CH2O and Ba(OH)2 gives a crystalline substance (IX), m. 256° (decomposition). IX with III gives R2NCONHR (R = 3,5,2-Me2(HO)C6H2CH2) m. 173.5° , as well as VIII and RNHCONH2 (X). [(HOCH2)2N]2CO with acid gives an amorphous precipitate, m. 228° (decomposition) which with III gives VIII and X.

IT 874517-40-5P, Urea, 1-(3,5-dimethylsalicyl)-3-ethyl-(preparation of)

RN 874517-40-5 HCAPLUS

CN Urea, N-ethyl-N'-[(2-hydroxy-3,5-dimethylphenyl)methyl]- (CA INDEX NAME)

CC 10 (Organic Chemistry) 20779-63-9P, Urea, 1-(hydroxymethyl)-3-phenyl- 35650-81-8P, Urea, ΙT condensation product with HCHO 42728-73-4P, Urea, 1,1'-(oxydimethylene)bis[3-phenyl-99169-96-7P, Urea, (3,5-dimethylsalicyl) - 102008-89-9P, Urea, 1,3-bis(3,5-dimethylsalicyl)-103281-70-5P, Urea, 1,1,3-tris(3,5-dimethylsalicyl)- 412014-30-3P, Urea, 854425-26-6P, Butyramide, 1-(3,5-dimethylsalicyl)-3-phenyl-N-(3,5-dimethylsalicyl)-3-methyl-854427-54-6P, Butyramide, N, N'-(oxydimethylene)bis[3-methyl- 874517-40-59, Urea,

1-(3,5-dimethylsalicyl)-3-ethyl-

(preparation of)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS

RECORD (1 CITINGS)

I OR 26023-30-3/BI OR 26161-42-2/BI OR 26811-96-1/BI OR 26917-25-9/BI OR 33135-50-1/BI OR 65792-44-1/BI OR

=> d his nofile

L5

L6

T.7

L30

(FILE 'HOME' ENTERED AT 11:34:54 ON 29 JAN 2010)

FILE 'HCAPLUS' ENTERED AT 11:35:07 ON 29 JAN 2010 1 SEA SPE=ON ABB=ON PLU=ON US20080097074/PN L1SEL RN FILE 'REGISTRY' ENTERED AT 11:35:18 ON 29 JAN 2010 10 SEA SPE=ON ABB=ON PLU=ON (135796-12-2/BI OR 25038-75-9/B L2

840501-68-0/BI OR 840501-69-1/BI) L3 STR L435 SEA SSS SAM L3

> 25716 SEA SSS FUL L3 1 SEA SPE=ON ABB=ON PLU=ON L5 AND L2

SAV L5 BER471/A STR L3

50 SEA SUB=L5 SSS SAM L7 L8

3789 SEA SPE=ON ABB=ON PLU=ON L5 AND 1/NR L9

3630 SEA SPE=ON ABB=ON PLU=ON L9 NOT NITRO? L10 3150 SEA SPE=ON ABB=ON PLU=ON L10 NOT S/ELS L11

2690 SEA SPE=ON ABB=ON PLU=ON L11 NOT ACID? L12

L13 STR L7

L14 50 SEA SUB=L5 SSS SAM L13

L15 2644 SEA SUB=L5 SSS FUL L13

1 SEA SPE=ON ABB=ON PLU=ON L15 AND L2 L17 811 SEA SPE=ON ABB=ON PLU=ON L15 AND 1/NR

620 SEA SPE=ON ABB=ON PLU=ON L17 NOT (METHOXYPHEN? OR L18 HYDROXYPHEN? OR BENZOIC ACID?)

L19 591 SEA SPE=ON ABB=ON PLU=ON L18 NOT S/ELS

L20 374 SEA SPE=ON ABB=ON PLU=ON L19 NOT X/ELS

FILE 'HCAPLUS' ENTERED AT 12:27:06 ON 29 JAN 2010

242 SEA SPE=ON ABB=ON PLU=ON L20

L22

1 SEA SPE=ON ABB=ON PLU=ON L21 AND L1 0 SEA SPE=ON ABB=ON PLU=ON L21 AND STEREOCOMPLEX COMPOUND? L23 L24

1 SEA SPE=ON ABB=ON PLU=ON L21 AND STEREOCOMPLEX COMPOSITI ON?

O SEA SPE=ON ABB=ON PLU=ON XYLYLENE BIS-STEARYL UREA

L25 1 SEA SPE=ON ABB=ON PLU=ON L21 AND STEREOCOMPLEX?

15 SEA SPE=ON ABB=ON PLU=ON L21 AND CRYSTAL?

L27 18 SEA SPE=N ABB=ON PLU=ON L6

2 SEA SPE=ON ABB=ON PLU=ON L21 AND POLYLACTIC? L28

O SEA SPE=ON ABB=ON PLU=ON XYLYLENE BISSTEARYL UREA L29

FILE 'REGISTRY' ENTERED AT 12:37:07 ON 29 JAN 2010

E XYLYLENE/CN

L31 1 SEA SPE=ON ABB=ON PLU=ON XYLYLENE/CN L32 2020 SEA SPE=ON ABB=ON PLU=ON XYLYLEN?/CNS

1 SEA SPE=ON ABB=ON PLU=ON L32 AND BISSTEAR?/CNS L33

L34 O SEA SPE=ON ABB=ON PLU=ON L32 AND BIS STEAR?/CNS L35 4 SEA SPE=ON ABB=ON PLU=ON L32 AND STEAR?/CNS

L36 STR L13

2 SEA SUB=L15 SSS SAM L36

L37 L38 50 SEA SUB=L15 SSS FUL L36

SAV L38 BER471A/A

| | | SAV L15 B | ER471B/A | | |
|-----|-------------|-------------|------------|----------|----------------------------------|
| L39 | 28 | SEA SPE=ON | 1 ABB=ON | PLU=ON | L38 AND 1/NR |
| | | | | | |
| | FILE 'HCAPI | LUS' ENTERI | ED AT 12:4 | 13:42 ON | 29 JAN 2010 |
| L40 | 39 | SEA SPE=O | N ABB=ON | PLU=ON | L39 |
| L41 | 29 | SEA SPE=O | 1 ABB=ON | PLU=ON | L40 AND (1840-2004)/PRY,AY,PY |
| L42 | 14 | SEA SPE=O | 1 ABB=ON | PLU=ON | L27 AND (1840-2004)/PRY,AY,PY |
| L43 | 15 | SEA SPE=O | N ABB=ON | PLU=ON | (L22 OR L23 OR L24 OR L25 OR |
| | | L26) | | | |
| L44 | 9 | SEA SPE=O | N ABB=ON | PLU=ON | L43 AND (1840-2004)/PRY,AY,PY |
| L45 | 35 | SEA SPE=O | N ABB=ON | PLU=ON | L41 OR L42 OR L44 |
| L46 | 12 | SEA SPE=O | N ABB=ON | PLU=ON | L45 AND (MOLD? OR MOULD?) |
| L47 | 9 | SEA SPE=O | N ABB=ON | PLU=ON | L45 AND CRYSTAL? |
| L48 | 16 | SEA SPE=O | N ABB=ON | PLU=ON | L45 AND (PLASTIC? OR POLYMER?)/ |
| | | SC,SX | | | |
| L49 | 35 | SEA SPE=O | N ABB=ON | PLU=ON | (L45 OR L46 OR L47 OR L48) |
| | | E BIODEGI | RADABLE/CI | | |
| L50 | 17894 | SEA SPE=O | N ABB=ON | PLU=ON | "BIODEGRADABLE MATERIALS"+PFT, N |
| | | T/CT | | | |
| L51 | 2 | SEA SPE=O | N ABB=ON | PLU=ON | L49 AND L50 |
| L52 | 2 | SEA SPE=O | N ABB=ON | PLU=ON | L49 AND BIODEGRADABL? |
| L53 | 35 | SEA SPE=O | N ABB=ON | PLU=ON | L49 OR (L51 OR L52) |
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